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ABSTRACT

This planning guide and collection of resources is designed to help higher education faculty become more aware of current research and thinking on adult learning and to participate actively in institutional changes that make campuses, particularly in the California State University system, better able to meet the needs of adult students. Each of 11 modules in three parts focuses on a particular facet of the adult learner, and provides practical suggestions for addressing adult learner needs. Following an overview section which describes andragogy, the theory and practice of teaching adults, part I, "Adult Learners and Their Needs," contains the following sections: module 1: "The Adult Learner: Research and Implications"; module 2: "Developmental Needs of the Adult Learner"; module 3: "Educational Needs of the Adult Learner." Part II, "Institutional Strategies for Meeting the Needs of Adult Learners" includes modules 4 through 7, namely: "Providing Support Services for the Adult Learner"; "Facilitating Progression through Recognition of Prior Learning"; "Designing Curricula for the Adult Learner"; and "Instructional Delivery Options for the Adult Learner." Part III addresses individual strategies and includes module 8: "Providing Opportunities for Self-Directed Learning"; module 9: "The Importance of Experiential Learning"; module 10: "Effective Strategies for Teaching Adults"; and module 11: "Resources." An index is included as is a bibliography of about 120 items. (JB)

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THE ADULT LEARNER IN HIGHER EDUCATION

A Resource and Planning Guide

HE 025 732

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- increase awareness of the work of the CSU Institute for Teaching and Learning;
- increase access to the work of CSU/ITL affiliates;
- begin to build a subset of information on teaching and learning that supports *The National Teaching and Learning Forum (NTLF)*, ERIC/HE's newsletter;
- encourage use of the ERIC system by CSU/ITL member affiliates and the *NTLF* readership; and
- test a model for collaboration between ERIC/HE and a major higher education system.

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THE ADULT LEARNER IN HIGHER EDUCATION

A Resource and Planning Guide

The California State University
Center for Innovative Programs

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Overview

Background

In *The Adult Learner: A Neglected Species*, (1973), Malcolm Knowles equated his efforts to summarize what was known about adult learning to a trip up the Amazon. "It is a strange world, that we are going to explore together, with lush growth of flora and fauna with exotic names (including fossils of extinct species) and teeming with savage tribes in raging battle. I have just made a casing-the-joint trip up the river myself, and I can tell you that my head is reeling." Seven years later, Knowles said, "The river is much tamer. We are beginning to understand what we do that works and why it works."

Since this initial expedition, a body of knowledge about adult learning has emerged. This knowledge is part empirical research, part extrapolation from adult learning theory, and mostly the experiences of practitioners who teach and counsel adult learners.

Knowles first drew attention to the concept of adult learning in 1970 when he used the term "andragogy"* to differentiate the learning needs of adults from those of children (pedagogy). Andragogy is based on four assumptions about the development of adult learners:

1. They have moved from viewing themselves as a dependent to viewing themselves as self-directing human beings.
2. They have accumulated a growing reservoir of experience that becomes an increasing resource for learning.

---

*The word "andragogy" originates from the Greek word *andra* (meaning "adult"). It refers to the body of theory and practice on teaching adults. The word had been used in Germany as early as 1833 and has been used extensively during the last decade in Europe.

3. Their readiness to learn has become increasingly influenced by the developmental tasks of their social roles (as a professional, as a parent, as a spouse, etc.).

4. Their perspective has changed from postponed application of knowledge to immediate application, and they are particularly interested in how the knowledge they acquire can be applied to real-life situations.

Andragogy quickly found fervent supporters among trainers and post-secondary educators that had had enough of instructional systems design and the behaviorist approach to learning. Andragogy placed the learner, rather than the program design, at the center of the instructional process. It also provided a sense of professional validation among instructors and trainers who had been teaching out of the mainstream of public education.

Even as the concept of andragogy became elevated by many practitioners to the status of established doctrine, the limitations of Knowles' assumptions were recognized. The emphasis on problem-centered learning, for example, tended to trivialize the large amount of adult learning that is undertaken "for its innate fascination and the joy and fulfillment it provides" (Brookfield, 1986). The classroom experiences of many adult educators fail to support the assumption that adults are more comfortable with a self-directed approach to learning. Knowles himself acknowledged these limitations when he recognized that andragogy was merely a model to describe the innate learning tendencies of all human beings, tendencies that emerge as people mature. When viewed in this evolutionary context, his assumptions about adult learners become more prescriptive than descriptive.

Goals

Whether you view andragogy as a theory, a model, or a set of assumptions about human learning, it has made a significant contribution by placing the learner at the center of the educational process. It has also helped educators to appreciate the needs of learners, particularly those who are maturing as adults. How these needs can be best addressed in our institutions of higher learning is the theme of this *Guide*.

In a paper prepared for the Commission on Higher Education and the Adult Learner, Arthur Chickering (1983) explains how these needs can be met through a strengthening of arrangements and alternatives already available:

> *We need increased respect for and responsiveness to individuals and individual differences. . .*
>
> *We need sound processes and measures to assess the knowledge and competence students have acquired through prior formal and non-formal education and through work and life experiences. . .*
>
> *We need to. . .create a more effective integration of theory and practice, of concrete experiences and general experiences. . .*
>
> *We need to examine curricular and course content. . .for their pertinence to the pragmatic issues and concerns of adult learners. . .*
>
> *We need to learn how to provide mixed modes of instruction which combine . . .experiential learning, reading and class sessions. . .computer and video resources. . .*
>
> *We faculty members need to learn to work with students. . . as resource persons and colleagues who help students develop their own ability to define objectives, identify. . .resources for learning and evaluate whether their objectives have been achieved. . .*
>
> *We need to foster peer learning networks. . .*
>
> *We need to improve access and 'time on task' for learners by creating flexible scheduling. . .*

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> *We need admission criteria, orientation processes and ongoing advising activities which are appropriate for the diverse backgrounds of the students we serve. . .*

He concludes his analysis with an optimistic perspective:

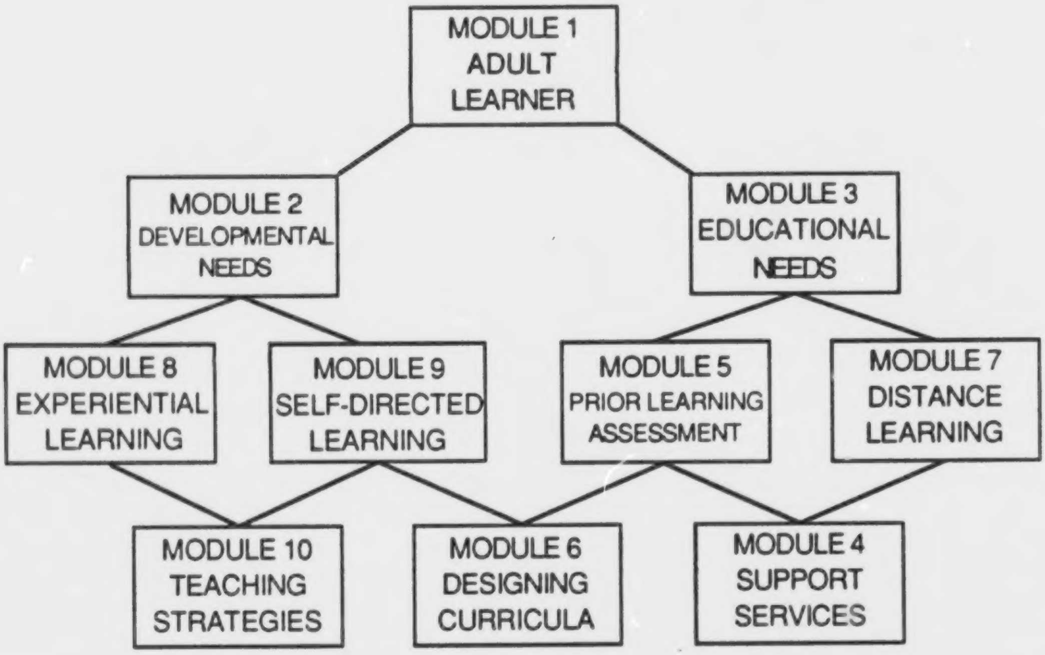
> *What is required in most cases is simply an act of will, a bit of initiative and a modicum of running room provided by an administration willing to translate abstract rhetoric about educational quality into concrete concerns for individual students and how they learn and individual faculty members and how they teach*

Purpose

This *Resource and Planning Guide* has been developed to help you, as an educator, become more aware of current research and thinking on the subject of adult learning and more actively participate in the kinds of changes described above. The *Guide* is intended for use by both faculty and administrative staff in traditional institutions of higher learning, where the need for such changes is most critical.

Organization

Each module focuses on a particular facet of the adult learner, and provides practical suggestions for addressing adult learner needs. The relationship between these various facets provides the overall structure for the *Guide*. (See figure on the following page.)


MODULE 1
ADULT LEARNER
MODULE 2
DEVELOPMENTAL NEEDS
MODULE 3
EDUCATIONAL NEEDS
MODULE 8
EXPERIENTIAL LEARNING
MODULE 9
SELF-DIRECTED LEARNING
MODULE 5
PRIOR LEARNING ASSESSMENT
MODULE 7
DISTANCE LEARNING
MODULE 10
TEACHING STRATEGIES
MODULE 6
DESIGNING CURRICULA
MODULE 4
SUPPORT SERVICES

Opposing points of view have been included to help you draw your own conclusions as to the validity of the concepts being presented. Articles have been included at the end of each module to provide additional depth. An extensive list of resources has also been included at the end of this *Guide* to help you explore selected topics of interest.

Approach

The *Guide* may be used for self-paced independent study, in group settings, or as a reference tool. No external resources are required. Questions have been integrated with the concepts and readings to stimulate thinking, relate new knowledge to prior experience, and encourage its application. There is no answer key, as your responses will be individually determined by personal experience and need.

PART I :

ADULT LEARNERS AND THEIR NEEDS

Module 1 The Adult Learner: Research and Implications

Module 2 Developmental Needs of the Adult Learner

Module 3 Educational Needs of the Adult Learner

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Module 1

16 B

Module 1

The Adult Learner: Research and Implications

–Who is the Adult Learner?
–Learner Tendencies: Childhood Versus Adulthood
–Testing the Assumptions of Andragogy
–Adult Learner Needs: A Summary
–References
–Reprints

The Adult Learner: Research and Implications

Preview

The *adult learner* is currently facing an identity crisis. Most educators have a nagging suspicion that adult learners are somehow different from younger learners, yet the nature of this difference is unclear. As a result of this ambiguity, the very definition of the adult learner has become a subject of debate. Is the adult learner a person who returns to school after several years, or an individual who seeks the knowledge to change his or her life direction? Is the difference merely a matter of age or experience? Or are adult learners different because they truly learn differently than traditional learners?

These are the kinds of questions that will be addressed in Module One as the nature of the adult learner is explored and defined.

Goals

In this module, you are invited to:

- Assess your own definition of the adult learner in light of research and current thinking in the area of adult learning
- Compare research findings on the adult learner with your own experience as an adult learner and educator
- Integrate personal observations with the research findings to identify the essential qualities that distinguish adult learners from traditional learners
- Develop some ideas for reaching adults based on an understanding of their needs

Key Issues

Most people who teach adults have their own personal definition of the adult learner. Some differentiate adult learners from other students by chronological age, developmental stage, or cognitive complexity. Others see societal roles, learning goals, or degree of self-direction as the distinguishing characteristic. Adult learners have even been defined in terms of the degree to which they participate in institutions of higher learning.

Questions

What are the risks associated with defining adult learners as a distinct category of learners? What are the consequences of denying the differences between adult learners and other learners?

Exercise

Take a few moments to reflect on your own personal view of the adult learner. Write your definition or list of characteristics in the space below.

Questions

Now reflect on the source of this definition. Was it influenced by an institutional or organizational perception of adult learners? Is it related to a particular theory or to research on the subject? Or did you derive it from your own observations, personal experiences, or insights?

Questions

How satisfactory do you find this definition to be in practice? How does it influence your approach to your work with adults?

Learner Tendencies: Childhood Versus Adulthood

Key Issues

When Malcolm Knowles drew the lines of distinction between traditional and adult learners, between the concepts of pedagogy and andragogy, his assumptions were based on generalizations regarding the learning tendencies of children versus adults. Many of these tendencies are listed in Table 1-1. Each set of tendencies represents opposite poles of a continuum within which any individual may fall at any given time.

Questions

Do these tendencies accurately reflect your perception of child learners versus adult learners? Are there any differences with which you would disagree?

Questions

At which point on the various continua would you place high school students? College students? Are the learner tendencies associated with adulthood any more stable than those associated with childhood?

TABLE 1-1: CHILDHOOD VERSUS ADULTHOOD LEARNING TENDENCIES

LEARNER TENDENCIES: CHILDHOOD VERSUS ADULTHOOD

Childhood	Adulthood
Children depend upon adults for material support, psychological support, and life management. They are other-directed.	Adults depend upon themselves for material support and life management. Although they must still meet many psychological needs through others, they are largely self-directed.
Children perceive one of their major roles in life to be that of learner.	Adults perceive themselves to be doers—using previous learning to achieve success as workers, parents, etc.
Children, to a large degree, learn what they are told to learn.	Adults learn best when they perceive the outcomes of the learning process as valuable—contributing to their own development, work success, etc.
Children view the established learning content as important because adults tell them it is important.	Adults often have very different ideas about what it is important to learn.
Children, as a group within educational settings, are much alike. They're approximately the same age, come from similar socioeconomic backgrounds, etc.	Adults are very different from each other. Adult learning groups are likely to be composed of persons of many different ages, backgrounds, educational levels, etc.
Children actually perceive time differently than older people do. Our perception of time changes as we age—time seems to pass more quickly as we get older.	Adults, in addition to perceiving time itself differently than children do, also are more concerned about the effective use of time.
Children have a limited experience base.	Adults have a broad, rich experience base to which to relate new learning.
Children generally learn quickly.	Adults, for the most part, learn more slowly than children, but they learn just as well. They also have the added advantage of superior judgment (wisdom, if you will).
Children are open to new information and will readily adjust their views.	Adults are much more likely to reject or explain away new information that contradicts their beliefs.
Children's readiness to learn is linked to both academic development and biological development.	Adults' readiness to learn is more directly linked to need—needs related to fulfilling their roles as workers, spouses, parents, etc., and to coping with life changes (divorce, death of a loved one, retirement, etc.).
Children learn (at least in part) because learning will be of use in the future.	Adults are more concerned about the immediate applicability of learning.
Children are often externally motivated (by the promise of good grades, praise from teachers and parents, etc.).	Adults are more often internally motivated (by the potential for feelings of worth, self-esteem, achievement, etc.).
Children have less-well-formed sets of expectations in terms of formal learning experiences. Their "filter" of past experiences is smaller than that of adults.	Adults have well-formed expectations, which, unfortunately, are sometimes negative because they are based upon unpleasant past formal learning experiences.

National Center for Research in Vocational Education. (1987). *Plan instruction for adults, Module N-4* . Columbus, OH: Ohio State University. Reprinted with permission.

Key Issues

The original assumptions on which andragogy was founded have been examined and re-examined in light of current research on adult learning. One re-examination by Chickering (Thomas & Chickering, 1984) established the following as the major qualities that differentiate adult learners from traditional-age learners:

- *A wider range of differences, more sharply etched*
- *Multiple demands and responsibilities in terms of time, energy, emotions, and roles*
- *More -- and more varied -- life experiences*
- *A rich array of ongoing experiences and responsibilities*
- *More concern for practical application, less patience with pure theory, less trust in abstraction*
- *Greater self-determination and acceptance of responsibility*
- *Greater need to cope with transitions and with existential issues of competence, emotions, autonomy, identity, relationships, purpose, and integrity*

In addition to these qualities, Brookfield (1986) suggests that the *capacity to be critically reflective* differentiates the learning of adults from that of children and adolescents.

Apps (1981), who differentiates adult students as returning students, sees this group differing from traditional students in at least four important ways:

- *Life experience* -- returning students bring a wealth of information to the classroom.
- *Motivation* -- returning students are highly motivated, often by a specific educational goal
- *Academic behavior* -- returning students often have problems adjusting to formalized learning methods and institutional demands
- *Other problems* -- in the form of unrealistic goals, social-familial problems, and an excessive pragmatic orientation

Questions

Reflect on your own experience as an adult learner. Which of the qualities listed above apply to you personally? Which, if any, do not apply to you?

Questions

Review your past experience working with adult learners. Which of the qualities listed above seemed to consistently characterize adult learners? Which qualities were less consistently noted?

Article

To learn more about the assumptions regarding adult learner behavior and the research that supports these assumptions, read the following article, which is reprinted at the end of this module. Then return to this page and answer the questions that follow.

Sheckley, B. (1984). The adult as learner: A case for making higher education more responsive to the individual learner. ***CAEL News.***

Questions

If you could select one descriptor to characterize the adult learner, what would it be? Does it change your own definition of the adult learner in any way?

Questions

Did you gain any new insights about the adult learner from Sheckley's article? If so, what were they?

Article

The next article builds on the premise that adult learners are, above all, a heterogeneous group. It discusses the implications of this diversity for both practitioners and institutions in general. Read the article, which is reprinted at the end of this module. Then return to this page and answer the questions that follow.

Schlossberg, N. M. (1987, Winter). Understanding and reaching adult learners. *McGill Journal of Education.*

Questions

As an educator, how do you currently "reach" adult learners? Which of the approaches discussed by Schlossberg do you already use?

Questions

Are there any other approaches you could use to reach adult learners in your particular situation? How would you implement these approaches?

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Adult Learner Needs: A Summary

Key Issues

In this module, you have been presented with a variety of assumptions, research findings, and general conclusions regarding the nature of the adult learner. You have explored the tendencies that define the adult learner as a distinctive entity, even though the distinction is often blurred by the diverse and ever changing nature of the human species.

Although these characteristics are by no means definitive, they are helpful in suggesting the kinds of needs that are frequently experienced by adult learners. Some of these needs are summarized below.

Experiences	Adults need to use prior experiences in learning new endeavors. The acknowledgement of this earlier experience helps adults link new knowledge with the old.
Sense of Relevancy	Adults need to know how the learning is relevant to their particular situation. New information must fit into a current need.
Learning Style	Adults need to learn in a manner that is consistent with their own learning style
Support Systems	Adults need special support systems to assist them in their life transitions and re-entry into the academic environment.
Alternative Learning Options	Adults need access to alternative instructional delivery options that address the scheduling and geographic constraints facing adult learners.

Self-Determinism	Adults need to be treated as responsible individuals; however, this need may stop short of accepting responsibility for self-directed learning.
Mattering	Adults need to feel that they are appreciated as significant contributors to the educational experience.

In the following modules, you explore these needs in greater depth, and begin to develop strategies for meeting them in your own practice situation.

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Apps, J. W. (1981). *The Adult Learner on Campus: A Guide for Instructors and Administrators.* Chicago: Follett.

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Cross, K. P. (1981). *Adults as learners: Increasing participation and facilitating learning.* San Francisco: Jossey-Bass.

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Knowles, M. S. (1980). *The modern practice of adult education: From pedagogy to andragogy* (2nd ed.). Chicago: Follett.

Schlossberg, N. M. (1987,Winter). Understanding and reaching adult learners. *McGill Journal of Education, 22*(1).

Schlossberg, N. K., Lynch, A. Q., & Chickering, A. W. (1989). *Improving higher education environments for adults.* San Francisco: Jossey-Bass. 1-5, 20-21.

Sheckley, B. G. (1984). The adult as learner: A case for making higher education more responsive to the individual learner. *CAEL News, 7*(8), *8*(1).

Thomas, R. & Chickering, A. W. (1984). Education and identity revisited. *Journal of College Student Personnel, 25*, 392-399.

Reprints

Sheckley, B. G. (1984). The adult as learner: A case for making higher education more responsive to the individual learner. *CAEL News*, 7(8), 8(1). Reprinted with permission.

Schlossberg, N. K., Lynch, A. Q., & Chickering, A. W. (1989). *Improving higher education environments for adults.* San Francisco: Jossey-Bass. 1-5, 20-21. Reprinted with permission.

THE ADULT AS LEARNER:
A CASE FOR MAKING HIGHER EDUCATION MORE RESPONSIVE TO THE INDIVIDUAL LEARNER

From CAEL News. "The Adult as Learner: A Case for Making Higher Education More Responsive to the Individual Learner," by B. G. Sheckley, 1984, Columbia, MD: Council for Adult and Experiential Learning. Reprinted by permission.

At the recent Council for Adult and Experiential Learning (CAEL) institute, Adults as Learners: Research to Practice, we spent an entire evening discussing the field of adult learning. Many interesting questions were posed: Is the adult a unique learner? Are all adults necessarily adult learners? What do we mean by "adult learner?" Is there a discipline we can call adult learning? What are the key differences between adult and "non-adult" learners? Can we describe how the adult learns? Is there an adult learning style? When we speak of the "adult learner", which individual learner are we talking about? Do the central issues relate to being an adult or to being a learner? Are issues of access and financial support for adult learners appropriate public policy issues?

The engaging debate of these questions—which lasted several hours that evening and never abated during the remaining days of the institute—led to some interesting conclusions. First, the term "adult learner" is a nominal label for a heterogeneous cohort of learners. Not only are these "adult learners" participating in higher education in increasing numbers but also, they are widely diverse in their learning interests, educational goals, individual differences, experiential backgrounds, motives for pursuing learning projects, and patterns of participating in formal classroom programs. Secondly, there is no single characteristic of "adult learners" which is not present—to some degree—among all learners. In other words, the adult learner represents an extreme on a continuum depicting a range of diversity among all learners. Thus, when college educators speak of the adult learner, they may be using an extreme prototype which exemplifies the increasing diversity of the college student population. Additionally, the greatest impact of the adult learner on higher education might be through the individual and personal examples which suggest that the higher education system needs to be more responsive to the educational interests of individual learners. Finally, if we are to improve the specific practice of adult education and the general practice of higher education, we must develop accurate perspectives on what we mean by "adult learner."

Is there a theory about adults as learners?

While there is an increasing body of research on the adult learner and an accompanying growth of suggestions relating to principles of effective practice in teaching adult learners, there still seems to be a lack of connection between existing research and practice. In one sense, this is understandable since, ad K. Patricia Cross (1981) writes, there is no comprehensive theory addressing all the complexities of adults as learners. In fact, as Cross notes, theory is one of the most underutilized vehicles for understanding the various aspects of adult learning. According to Cross (1981), there is not a strong emphasis on theory in adult education because of: "...the enormous diversity of adult learning situations, the practitioner domination of the field, the market orientation of nonsubsidized education and, frankly, the lack of desire or perceived need for theory" (p. 221).

Although there is no comprehensive theory addressing all aspects of the phenomenon adults as learners, there is research in related fields (e.g., developmental psychology, clinical psychology, etc.) and research about the practice of adult education which advances our understanding of adults as learners. Let us begin with this research to discuss the issue of the adult as a different learner.

Is the adult a different learner?

A key difference between what some refer to as the adult learner and the so-called traditional 18-24 year old student relates more to being an adult than to being a learner. This fact is reflected in the various attempts to develop a workable definition of "adult learners." The Commission on Higher Education and the Adult Learner, for example, defines "adult learner" as an individual whose major life role is something other than full-time student (Chickering, 1983). The emphasis on adult roles as a definition of adult learner is perhaps accurate since a review of the research on learning provides few distinctions that separate adults as different learners.

There is a lively debate on the question: are adults different learners? Although the first discussion of this issue began around 1926 as Lindeman advocated a practical approach to adult education, the question came into sharp focus with Malcolm Knowles' ideas about the adult learner as a neglected species (1978). Knowles described a difference between pedagogy (i.e., the art and science of teaching children) and andragogy (i.e., the theory of adult learning). Andragogy was based on four assumptions: 1) An adults' self-concept is invested in being self-directed; 2) Since adults have rich reservoirs of experience, teaching must emphasize analysis of experience; 3) Readiness to learn is related to developmental tasks; 4) Adults have a problem-centered orientation to learning.

The usefulness of andragogy is inconclusive. There are questions about andragogy as a learning theory, a philosophical position, a political reality, or a set of hypotheses subject to empirical verification (Cross, 1981). As noted by Cross (1981), it is not clear whether Knowles is advocating two distinct approaches to teaching, one for children and a different one for adults. The issue is clarified as Knowles states: "So I am not saying that pedagogy is for children and andragogy is for adults, since some pedagogical assumptions are realistic for adults in some situations and some andragogical assumptions are realistic for children is some situations...each is appropriate given the relevant assumptions" (1979, p. 53).

As with others attempting what might be called philosophical approach to characterizing the adult as a different learner, Knowles has more success in establishing an argument for an acceptable alternative to traditional education than in establishing the adult as a unique learner.

Another attempt to understand the differences which set the adult learner apart followed a path of "clientele analysis." In this approach, adults who participated in formal educational programs were surveyed and described in attempts to understand those characteristics which made them distinct. Coolican (1974) notes two limitations of these studies: 1) The tendency to forget the differences within groups while focusing on differences among groups; and 2) The focus on participation in formal instruction and not on the whole pattern of learning both in and outside the classroom. Taken together, the "clientele analysis" studies indicated that prior education, as the major predictor of participation, cut across all demographic descriptors (Cross, 1981). Additionally, the demographic characteristics only accounted for about 10 percent of the variance associated with participation in organized instruction (Anderson and Darkenwald, 1978). In other words, the clientele analyses did not note characteristics of adult learners which conclusively distinguish them from all other learners.

A third line of research on the adult learner investigated the learning behavior of individual adults. Allen Tough (1979), for example, found that adults tended to be very pragmatic and self-directed learners. In comparing the learning behavior of adults to those of young 10 and 16 year old learners, he concluded: "The data suggest that the out of school learning projects of young learners are fairly similar to adult projects" (1979, p. 23). While this research provided an understanding of the individual learning behavior of adults, it did not provide a distinctive picture of the adult learner. Clearly this research pointed out that many of the distinctive aspects of the adult as learner were a matter of degree and, sometimes, many of the distinctions were as great within groups of adult learners as between groups of older and younger learners.

The line of research related to individual development and individual differences delineates some issues specific to adults. This research shows that adults at different points in their lives have different learning interests and different perspectives on learning. Initially, these differences were seen as directly related to age, as in the ages and stages research (e.g., Gould, 1978). Recent research (e.g., Schlossberg, 1983), however, suggests that the transition itself is the important event—regardless of the age when it occurs. In other words, adults are not distinct learners just because they are going through life transitions. People of all ages—children not excluded—encounter life transitions. The challenge to education is to provide helping environments for learners of all ages undergoing life transitions. The major characteristic distinguishing adult learners is the wide heterogeneity of their life transitions.

Finally when we look at the learning process itself, Parsons (1978) notes that adults learn using the same processes of learning as do younger students. The only difference is that the interference effect seems more predominant among adult learners. In other words, because adult learners tend to have more responsibilities and complications in their lives than younger learners, there is more "interference"; thus, memorization and recall are more difficult for adults. McClusky (1970) refers to this as a principle of "margin"—or the resources and abilities a person has to devote to learning after he/she takes care of the demands made on him/her by self and society. From this perspective, the adult learner is different from a traditional student in that the adult learner has more "interference" and less "margin" for learning. However, this distinction is not particular to adult learners; it applies equally to learners of any age who have a wide range of responsibilities.

The major challenge adult learners present to the educational system is a wide diversity of interests, styles, motives, developmental tasks, life roles and patterns of learning. If the issue of diversity is seen as continuous—and not dichotomous— then the adult learner represents one extreme of the continuum. As the educational system adapts to the individual educational interests of the adult learner, the capability for improving the educational systems response to individual learners all along the continuum is greatly enhanced.

Diversity: A Key Characteristic of Adult Learners

The distinctive characteristic of the adult learner is diversity. As depicted in Table 1, the "adult learner" represents a heterogeneous group of learners who are widely diverse in learning styles, motivation for learning, life transitions, life roles, learning goals, developmental tasks, prior experience, and patterns of participation in formal educational programs.

In Part II of this article, we will discuss characteristics which, as a matter of degree, tend to distinguish the adult learner as a special learner and which require the higher educational system to provide alternatives. The common practice of offering standardized programs designed to meet the learning needs of a homogeneous population will not accommodate adult learners.

TABLE 1

A Continuum Depicting Diversity Among Learners

TRADITIONAL STUDENTS	ADULT LEARNERS
●	●
HOMOGENEITY	HETEROGENEITY

DIMENSIONS OF CONTINUUM

- Learning Styles
- Life Transitions
- Developmental Tasks
- Prior Experience
- Motivation
- Life Roles
- Learning Goals
- Patterns of Participation in Formal Programs

As K. Patricia Cross (1974) discusses, opening the door to educational opportunity is not enough. "For some students who have been underrepresented in colleges, the door to traditional postsecondary education opens only on more of the same kind of education that has failed to serve them in the past" (Cross, 1974, p. xi). The challenge is to develop an educational system which responds to the individual needs of all learners. As higher education adapts to the diversity and unique needs of the adult learner, the capacity to respond to the educational needs of all learners will be enhanced.

Which characteristics of adults require the educational system to adapt?

While adults may not be different learners, there are ways adults differ from traditional 18-24 year old students which require the higher educational system to adapt. Although these differences are highlighted by adult learners, they are present to some degree in all learners and provide a strong argument for altering aspects of the existing higher educational system.

Adult learners must adapt to a rapidly changing world

While some sources attribute the phenomenon of adult learning simply to increasing numbers of adults, there are factors other than a demographic shift which seem to be operating. Cross (1981), for example, notes that the rate adults participate in organized instruction has increased two and one half times as fast as the growth of the eligible population. Not only are more adults participating in organized instruction, but they are also participating to a much greater degree than ever before.

Our rapidly changing world provides a strong impetus for adults involved in various life roles to engage in continuous learning. Cross (1981) lists several changes which have encouraged the growth of what she terms "the learning society." Specifically, factors such as job obsolescence, increased participation of women in the labor market, increased longevity, job competition, increased leisure time, an aging work force, higher aspirations and social acceptability of career change all contribute to radically changing career and educational patterns. In analyzing our changing social patterns, Yankelovich (1981) discusses the new rules evolving in our society as we move from depression era values to instrumental values and new expressive values. Besides these social changes, technological changes in all fields require continuous education to remain competent. Technological advances result in radically different ways of doing things. These social and technological changes spur adult learning.

Oxnard (1982) states that anyone who conceives of the changes higher education needs to make in serving adult learners only as accommodating increased numbers misses the entire point. Specifically, he discusses the new educational interests of adults for assistance in making a mid-life career change, for the skills needed to stay abreast of the technological advances in a current career field, for leisure time activities and for adjusting to new life roles.

Although the various career, community and related life roles of adults require them to participate in continuous learning to stay abreast of changes, these same pressures are now impinging, albeit to a lesser degree, on traditional 18-24 year old students as they grapple with issues such as the prospect of five to seven career changes during their lifetime. As higher education provides flexible options for the adult learner to stay abreast of a rapidly changing world, the educational opportunities of all learners are improved.

Adult learners are usually pragmatic

The pragmatic nature of adult learning was introduced by Lindeman in 1926 when he wrote that the approach to adult education should be via the route of situations, not subjects. This approach is even more appropriate today given our rapidly changing world.

In studying individual adult learning projects, Tough (1979) describes how pragmatic interests motivated adult learners. He found that most people started their learning project because they wanted to use the knowledge or skill to take action, and continued their project because they wanted to use the knowledge or skill to take action, and continued their project because they anticipated using the learning in a concrete manner such as performing some responsibility at a higher level. Similarly, in a study conducted with community college students, Sheckley (1983) found that immediate use was the reason most adults gave for undertaking learning projects. Penland (1977) found that 76 percent of the learning projects reported by adults related to practical topics such as business, jobs or child care. Tough (1979) also found that one reason adults chose to conduct self-planned learning projects—instead of participating in an institutionally based program—was their belief that they would actually lose time by turning the responsibility for planning over to someone else. In summarizing the research on "why adults learn," K. Patricia Cross (1981) concludes that most adults are responding to transitions in which needs for new job skills or for knowledge about family life serve as "triggers" to initiate learning activity.

The pragmatic nature of adult learners accentuates the importance of personal knowledge as opposed to objective knowledge (Dewey, 1938). According to this principle, the more personally relevant the learning is, the more motivated the learner is to pursue the learning. The principle applies to learners of all classifications. As the educational system adapts to accommodate the pragmatic interests of the adult learner, it will provide opportunities for all learners to conduct personally relevant learning projects.

Adult learners are developing over an entire lifespan

There is a new appreciation of adult potential and of adult development. In only a decade, the study of adults as learners has changed from an investigation of decay and decline to an analysis of growth and potential. Thorndike (1935) for example, studied the decline of adult IQ and performance as a function of age. More recently, Horn (1979) has shown that, while speed and performance may decline with age, the ability to synthesize and apply information increases with age.

The ideas of adult development as a lifelong process originally proposed by Carl Jung and Erik Erickson have been expanded more recently by Levinson (1978), Gould (1978), and Loevinger (1976). There are three specific implications of the developmental stage research for adults as learners. First, adults at different stages of development would have different learning interests reflective of different capacities and different perspectives on the world. Secondly, education can play an important role in stimulating movement from one stage to the next. Finally, the developmental process will vary as a function of individual differences.

A related line of research discusses how life transitions promote adult learning (e.g., Aslanian and Bricknell, 1980; Schlossberg, 1983). From the transitions research we can understand that adults learn because transitions are an inevitable part of life, and change creates the challenges and stimulation that promote learning and therefore development.

The developmental focus so important to understanding adult learners has important implications for learners of all ages. For example, Chickering (1981) argues that individual development is a central mission of institutions of higher education. Thus, as the higher educational system adapts to accommodate the different developmental ages and stages of adult learners, it also increases important developmental learning opportunities for all learners.

Adult learners are heterogeneous

Although individual differences exist among individuals of any age group, the range of differences increases dramatically among older adults. According to Chickering (1981) and Knowles (1978), as individuals grow older they tend to demonstrate an ever increasing range of individual differences. Neugarten (1976) describes the process of "individual fanning out" by noting that there is greater variability among a group of 60 year olds than among a group of 10 year olds.

These differences have important implications for understanding adults as learners and for designing facilitating learning environments. Increasingly, the research on individual differences demonstrates that adult learners come to the college classroom with a wide array of individual differences which may not match the prevailing classroom environment which usually assumes a relatively homogeneous student population. For example, Kolb (1981) describes how individuals have individual learning preferences. Tough (1981) discusses how adults vary in their tendency to be self-directed learners. Heath (1964) delineates how three distinct temperaments developed and learned best within a university setting. Rotter (1966) develops the idea that individuals differ in the perception they have of the amount of control they exercise over the environment. Some individuals, for example, believe that luck, fate, or chance controls their lives while others believe that they control their own destiny.

From the research on individual differences, we know that there is a range of variability within any group of learners. From the research on adult development, we know that this range of variability increases with age. One of the greatest challenges adult learners present is the wide range of individual differences they bring to the classroom. As higher education adapts to this heterogeneity, the capability to accommodate individual differences among all age groups will be increased.

Adults are constantly learning

As previously noted, adult learners are individuals whose major life role is something other than full-time student. Accordingly, adults, in their various life roles, have wide range of learning resources available to them. Several research studies show that adults actively use these resources (Sheckley, 1983).

When a broad definition of what constitutes "learning" is used, the research suggests almost all adults are constantly learning. Petersen (1979), in describing the sources of education and learning in the United States, suggests that "virtually everyone" uses individual and personal sources of learning. In a study of the educational pursuits of the American adult Johnstone and Rivera (1965) found that approximately one person in five had been active in some form of learning during the twelve-month period before the interview.

In his investigations, Tough (1979) used the concept of learning project to study the learning behavior of adults. He defined learning project as a series of related episodes adding up to at least seven hours. "In each episode, more than half of the person's total motivation is to gain and retain certain fairly clear knowledge and skill, or to produce some other lasting change in himself" (Tough, 1979, p. 6). Tough found that the average adult in his study spent 700 to 800 hours each year completing eight separate learning projects. One major outcome of Tough's studies was the validation of the extent of adult learning, or, as noted by Coolican (1975), the question regarding adult learning was no longer whether adults learned, but how much they learned.

The research of Tough (1979), Petersen (1979), and Johnstone and Rivera (1965) provides an interesting contrast to a more traditional view of adult learning as participation in an institutional based program of study. Whereas the studies cited above suggest that virtually all adults are learning, the National Center for Education Statistics (NCES), using a very traditional view of adult learning, reports that only 12 percent of adults in America participate in organized learning. These contrasting viewpoints, when combined, provide an accurate perspective on two conclusive aspects of adult learning: 1) Adults are constantly learning; and 2) Only a small percentage of their learning occurs in a classroom.

This research indicating that adults are constantly learning presents several challenges to institutions of higher education. First, the challenge to increase access to institution based educational resources for learners who are not interested in classroom based programs. Secondly, the challenge to expand classroom based programs to use the experiential learning resources adults encounter in their various life roles outside the institution. Next, the challenge to structure the academic program so that it builds on the experiential learning adults have acquired in their various life roles and does not require them to repeat learning they may have acquired in an extra-institutional setting. Finally, the challenge to recognize the wide diversity of learning individual adults have acquired outside the academy.

As institutions of higher education adapt to the heterogeneous backgrounds and the extra-institutional learning of individual adults, and use the rich experiential learning opportunities available in respective adult life roles, the opportunities for learners of all ages will be improved.

What are the implications for higher education?

Throughout this article, we have seen that the major challenge presented by the adult learner is an issue of diversity. Chickering (1983) discusses how educational practices at many institutions are oriented to serve a narrow range of educational and developmental possibilities. Because of the diversity within any population of adult learners, an institution serving adult learners simply cannot design its educational program for an assumed range of homogeneous student interests. When adult learners are involved, the homogeneity does not exist.

When an institution has an adult student population, the institution must be able to serve adult learners who are adapting to a changing world, have a pragmatic orientation to learning, are progressing through various developmental stages and are frequently undergoing role and status transitions, are becoming more unique with each passing year, are constantly learning in a wide variety of settings, and have a great many demands on personal time, energy and emotions. As institutions make this adaptation to serve the wide diversity of individual educational needs and interests of adult learners, education opportunities for all students as individual learners will be increased.

The changes required for this adaptation do not represent a wholesale restructuring of higher education. As noted by Chickering (1983) all that is required is a shift of attitude so that administrators, counselors and faculty can have some room to maneuver as they make changes to accommodate an increasingly diverse student population. According to Chickering (1983), the changes involve more flexible and varied alternatives for access, greater recognition of personal, professional and social contexts, recognition of prior experience and use of ongoing experiences and responsibilities, greater responsiveness to individual responsibilities, and greater integration of theory and practice.

These changes are neither monumental nor impossible. Many institutions have already made changes to respond to the diverse cohort of adult learners. Such programs deviate from traditional college programs in one or more of eight dimensions: location, time, student learning objectives, content, learning activities, learning resources, evaluation and authority (Chickering, 1983). As these changes are made, the programs become more responsive to individual learners.

Looking closely at what must be done to adapt higher education to serve the adult learner, we understand that the shift relates to accommodating an increasingly diverse learner population. If we are serious about adapting higher education to the diverse educational interests of the adult learner, we also improve the ability of higher education to accommodate individual differences among all learners. As we state a case for adapting to the adult learner, we make a strong case for improving the capacity of higher education to respond to the educational needs and interests of all learners as individuals.

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Understanding and Reaching Adult Learners

Abstract

Advisors, faculty, administrators who work with adult learners need to understand them. This understanding incorporates learning capacity, learning styles, readiness to learn, and participation in learning. Advisors, faculty, and administrators use this knowledge base to 1) increase their advising repertoire, 2) change the climate in their classrooms, and 3) make adult students feel they matter.

The adult learner, who enrols in a university program, may encounter some situations that are frustrating and confusing. My awareness of these problems was heightened when I invited a friend to lunch during the preparation of this paper.

My friend, who has a Ph.D. from the University of Chicago and is now enrolled in a Master's degree in Social Work, made it clear that, as a former professor at another university, she felt robbed of dignity and degraded. Seeking to understand her better, I asked her what it feels like to be an adult learner? Also, were her advisors helpful? These two simple questions evoked an enormous outpouring. "Nancy, it's like being a bag lady. I carry two bags in the winter – one for books and one for boots. I shuffle around hoping a professor will invite me in to sit for a minute. I have no place to get messages. As to my advisor, she is a wimp. I went to her about substituting a course. She sent me to the Dean who would not see me. Back to the advisor I went. Unable to make the change herself, she did not intervene with the Dean."

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Consider another example – John, a 28-year-old man who had graduated from high school 10 years before and now sought higher education. This young man, handicapped by a severe learning disability, had compensated for it. After all those years, he finally got up his courage and went to a nearby community college to register. John reports that his advisors were unsympathetic, lazy, and disinterested. As a result of their lack of assistance, he in fact, had to take off from work three different times in order to return and complete the registration process. His advice: energize advisors and tell them about commitment.

The landscape is not, however, universally bleak. Here is a success story. I interviewed Shirley – a 48-year-old woman about to complete her B.S. in business management. She has a 4.0 average. She credits her success to her own competence and organizational skills – and equally to supportive, energetic, and informed advisors. They were available, they knew the rules, they cared, and they delivered.

Clearly, as these vignettes illustrate, advisors are terribly important to students of any age and they can be "for better or worse." Most of us would like it to be "for better." I suggest that we can engage in some specific activities which can insure that we are in the category "for better." If we will, as a first step, really understand the adult learner, this understanding will suggest a number of ways to better reach this population.

Understanding Adult Learners

It is difficult to realize that by 2050 life expectancy will be 100 (Siegel & Taeuber, 1986, p. 98). This revolution in mortality will, of necessity, force us to rethink the meanings of age. Hagestad (1986) suggests that the common pattern of pressuring children to begin preschool earlier, rushing young people through high school, college, and then graduate school, does not make sense. Society might better help people think about ways to prepare more slowly and over longer periods of time for 80 years and more. She suggests that we need a life span slogan such as Think 80.

The implications for educators are enormous. The demographic revolution will force us to recast our assignment of education, work, and leisure "sequentially to the life stages of youth, adulthood, and old age." Changing "the relation between education and the stages of life" will be "a transformation as far-reaching as the 'discovery of childhood' described by Ariès" (Moody, 1986, pp. 191-2).

This change to lifelong learning, recurring education, or blended life plans requires a close look at the adult learner. Is the adult learner the individual who has been out of school for several years and has decided to return? Is the adult student a person who decides to change gears and direction, entering professional training in midlife to late life? Is the adult learner a 50-year-old or a 30-year-old? Is the adult learner experienced or inexperienced? In other words, is there a definable entity known as the adult learner? Is there a distinct way in which adults learn?

In answering the question, Is there such an entity as the "adult learner"?, a case can be made for either position. Case 1: Yes, there is such an entity as evidenced by the growing number of articles and books on the subject demonstrating the special needs and capacities that distinguish them from traditional aged students. Case 2: No, there is no such entity as the "adult learner"; rather, adult learners are heterogeneous just as young learners are. Some would say that categorization itself causes difficulties. To say that the adult learner is a distinct category might be thought to feed into the "agism" of the current society. By making age the central variable, one might overlook other important characteristics of the adult learner or, worse, conclude that people at certain ages are simply too old to learn. On the other hand, denying the existence of adult learners as a distinct category may well lead to oversight of special needs of that population, needs which should be addressed by educator and policy makers. Of course, one could conclude that there is a distinct category known as adult learners, but within that category, there are wide and often dramatic differences.

This discussion is based on different assumptions about age. On the one hand there are those who see chronological age itself as the defining variable. For example, according to Levinson (1978), the issues of the 20-year-old are quite distinct from those of the 40-year-old. Levinson links adult behaviour to age and describes six distinct periods emphasizing sequentiality and similarity in the adult experience. This view has been widely noted in both the popular and scholarly press. Opposing these stage theorists are those scholars like Neugarten (1982), who analyze the complexities, varieties and heterogeneities of adulthood; who look at continuity and change across the course of life, but who are more concerned with the lack of predictability, with the surprises, with the unexpected things that can happen at any age to anyone. Neugarten concludes that people grow old differently. In fact, the scope of these differences becomes greater, not narrower.

Hagestad (1985) demonstrates the impossibility of assuming that adult lives follow an orderly, linear process. Actually, the process is circular. Careers are interrupted and started and individuals make loops in the age system. Examples of such loops would be a woman who becomes a college freshman at the age of 45 or a man who starts a new family at the age of 50. People engage in renewal activities all through adulthood; for example, in a given class one might find three grandmothers ranging in age from 50 to 80. What we are seeing is a demographic change where four- and five-generation families may be the norm: where one can be both a grandmother and a granddaughter simultaneously.

Many educators talk and think about the adult learner as if there were such a recognizable, single entity for whom there is a set way of teaching, a set way of learning. It is tempting but wrong to assume that appearances and age can provide an understanding of what people think or feel, or how they behave. There is, we submit, a fluid life course. We are experiencing what Cross (1981) calls the "blended life pattern" in which one does not necessarily follow a prescribed life course – meaning one no longer goes to school, works, marries, and has children in that order. Some people at an unconventional age, are, for instance, marrying for the first time. Indeed, the facts about adult students that may really count are almost certain to be quite different from any current widely-held assumptions. Adults are a most diverse group, and, of course, people of all ages are heterogeneous and diverse; but generally as people get older, their idiosyncratic experiences and different commitments produce much more variability, not less.

Assumptions About Adult Learning

If our conclusion is correct – that adults are heterogeneous and variable, and that they become more so as they age – then, obviously, that truth has implications for how they learn. To understand the variability of adults as learners we will examine some data on their capacity to learn, learning styles, readiness to learn, and participation in education.

Variability – learning capactiy

Although few would, I hope, subscribe to the notion that "you can't teach an old dog new tricks", the conventional wisdom does seem to be that intellectual functioning slows down with age. The newer data show that you can indeed teach old dogs new tricks, that learning, memory, competency do not necessarily slow down. In fact, given the proper environmental stimulation and good health, capacity can increase. Kohn (1980) and his associates demonstrated that learning capacity may increase for those men and women working in jobs assessed as substantively complex. Park's studies of memory contradict the usual findings that memory decreases with age. First, she shows the ineffectiveness of laboratory tests for understanding what occurs in "real" life. She concludes: "Although older adults may not remember as effectively as young adults both in and out of the laboratory, the encoding process and use of contextual information does not appear to be the locus of any qualitative deficits" (Park, 1986). With these new data, what do you say to a 55-year-old woman who wants to apply to a doctoral program in counselling psychology?

Variability – learning style

Even if we agree that capacity can be maintained and even increased, can we as advisers, counsellors, and teachers treat every adult in the same manner? Obviously not. Kolb (1981) contends that people learn differently. Some learn through **concrete experience**; others learn by **reflecting**; still others by **abstract conceptualization**; and some others by **active experimentation**. Although I have always had an aversion to the roughness of football, when my son began playing, I began understanding Kolb's work. The coaches teach by using all four modes of learning. The players had the concrete experience of being hit on the head and playing even with concussions; they reflected by watching videotapes of the game and discussing what they did that was effective and ineffective; they engaged in abstract conceptualization by studying a variety of plans and conceptualizing a "game plan" – how to engage in a winning game; they actively experimented by returning to the field and practising what they learned. Kolb's message was reinforced when I won a 20-year-old fight with my husband and convinced him to take dancing lessons. The teacher had us watch a videotape, showed us steps, made us promise to practise, and then insisted that we discuss the concept. Steve went to the lessons, with heavy heart and foot. He paid attention during the lesson but he refused to practise at home. He kept saying, "I learn by conceptualizing and visualizing; I have it in my head." One night we went dancing with friends, but when we entered the dance floor, Steve stood paralyzed. He could not translate what was in his head to his feet. He realized the importance of practising.

Variability – readiness to learn

According to one study, adults return to school primarily for career or family transition. Most women returned because of family transition followed by career transitions; but, for the most part, men's reasons were reversed (Aslanian & Brickell, 1980). I suggest that readiness for the learning transition can be understood by applying the Transition Model – a structured system for assessing an individual's readiness for any transition (Schlossberg, 1984).

Readiness depends upon measuring strengths and weaknesses in three key areas. The first is the **transition or situation itself**. Does the individual see the learning situation as positive, negative, dreaded? Does it come at a good or bad time? Is the individual undergoing other stresses? For example, a young woman with two children to support realizes that in order to move out of this restrictive lifestyle, she needs further education with a career focus. She is ready to learn because of career reasons but not ready in terms of caring for small children. One young man is very ready to learn. He sees the learning transition as positive and it is at a particularly good time in his life. We see that each potential learner is in a different place regarding the learning transition.

The second area predicting readiness relates to one's inner strengths – that is, one's ability to cope and to use many coping strategies. The data are clear on one point – there is no single effective coping strategy. At times, an individual needs to fight to change the situation itself; at other times, changing the meaning of the situation is all that is required: often, relaxing in the face of stress by running, swimming, meditating is helpful; and, finally, there are times when taking no action is the best strategy. Individuals who cope in a flexible manner, using a large repertoire of coping strategies, have better chances of adapting to the learning transition.

Support systems at the institution, at home, and in the community constitute the third area predicting readiness for a learning transition. In a recent study of adults engaged in non-traditional learning, we discovered that support is "a many splendored thing" (Schlossberg & Warren 1985). If you ask an adult learner if his or her significant other is supportive, the answer generally is in the affirmative. However, if you ask, "In what ways is your 'significant other' supportive; in what ways is your 'significant other' not supportive?", you assume that most people experience support as well as subtle, or not so subtle, sabotage. One woman, Virginia, left her job and returned to school full time. Her mother, who lived with her, was verbally very supportive. Yet right before class, Virginia's mother, who was immobile, would tell Virginia she needed something from the drug store. In addition, Virginia's friends kept telling her she was doing too much. After several months, Virginia withdrew from school.

Variability – participation in education

Cross suggests another way to understand why one adult participates and another does not; or even why one person might, at one time in life, participate, and decline to do so at another time. Cross identifies three sets of factors that keep us from learning: dispositional, institutional, and situational (1981).

The **dispositional barriers** result from the attitudes people have about themselves. Only recently a person of 50 told me she was too old to go to graduate school. Ask yourself if you agree that age should be a variable in considering learning.

Situational barriers are those that are specific to a given individual at a particular time. For example, many adult children are caring for older parents and young adult children. This kin-keeping is a situational barrier, on the increase, which prohibits people from taking on a new activity such as returning to school.

The third set of barriers are **institutional** ones. Does the institution accomodate adults? Is there flexibility in scheduling and in awarding money to part-time students? Are secretaries on duty after 4:30? Adult learners attribute great importance to the institution. If there are policies, procedures, and activities that make it possible for them to take classes at convenient times, to buy books at off-campus locations, to reach advisors on the phone easily, then adult learners are encouraged to participate. If on the other hand, the admissions policies discriminate against older students, if financial aid is not available, if rules and regulations are rigid and do not fit in with the complex lives of many adults, then they will be discouraged from attending and remaining.

It seems clear, based on the previous discussion, that before advisors, counsellors, administrators can do something to and for adult learners, they need to understand that adult learners are not just a category. Some are bright, others dull; some are knowledgeable, others ignorant; some are energetic, others apathetic; some are anxious, others self-confident; some process information in a rigid manner, others handle and digest complex ambigious material. They are of varying ages and places in the life span and from different social classes. In other words, there is tremendous variability. I have pointed out four areas where variability seems most relevant to our discussion of understanding and reaching adult learners. They are: cognitive capacity, learning styles, readiness for learning, and participation in learning. The critical question now becomes: Once we have a knowledge base about adults, how can we reach them?

Reaching Adult Learners

Our challenge, individually and collectively, is to vigorously pursue the goal of becoming sensitive and competent advisors for the future learners – adults. To illustrate, I will suggest a few new advising stragegies, stemming from the knowledge we have of the adult's cognitive capacity, learning style, transition readiness, and participation. Perhaps there are many more.

Changing your climate

Bernice Sandler, Director of the Project on the Status of Women, American Association of Colleges, studied the ways in which women perceive the classroom climate as chilly (Sandler & Hall, 1982). Thinking back to our Bag Lady, would she have been welcome in your office? Do you establish a chilly or warm office climate for adult learners? Would you encourage or discourage an adult considering a degree program at age 50? There are so many ways in which our attitudes about aging influence the climate we create. These kinds of attitudes are often deeply ingrained and negative; they must be resisted with new data about successful aging and the possibility of increasing cognitive capacity as one ages.

Increasing your advising repertoire

If, as I believe we must, take Kolb's work seriously – that all of us learn differently – then effective advisors will strive to increase their advising repertoire. Let me illustrate with an example from the teaching role. I usually teach by abstract conceptualization. In a class designed to teach theories of adult development, I presented material in my traditional way – lecturing. After learning about Kolb's work, I realized that many of my students did not learn that way. I forced myself to expand my teaching repertoire. In order to have the students experience the different theories of adult development, I had them each think of something going on in their own lives and apply at least two different theories to their situation. In this way, I made the abstractions concrete. Then, I divided the room into four groups, each group representing one major theoretical position. The students saw a videotape of a middle age man. Each group debated the case from the point of view of the assigned theory. This forced them to experience the theories.

I realize there are tremendous differences between advising and teaching, but the process of expanding one's repertoire is similar. First, identify your usual style of advising. Then brainstorm additional strategies which will enable you to reach others whose style differs from yours.

Applying the transitional model

This model enables individuals to score their readiness for a transition. First, an individual assesses the transition itself, the support systems, coping strategies, and inner resources. This assessment permits identification of the problem area or areas. Once an individual sees which of these factors are causing problems, the individual can take action by controlling the transition, mobilizing inner strengths, or modifying external resources and supports. To be more specific, we have developed the Transition Readiness Quotient (Schlossberg, et al., 1986). After completing it, the individual computes a score. The score indicates whether the person is ready for the transition, and indicates which area needs to be worked on – the transition, the environmental supports, or the individual's coping style.

Advisors have reported the usefulness of this tool. In one class of returning students, the adult learners can clearly pinpoint what areas they need to shore-up and why they are having problems. Mostly, it should help them develop a time perspective about transitions.

Creating a place for adults to matter

The American Council on Education's Commission on Higher Education and Adult Learner commissioned the development of a self-study guide. Representatives of over 200 institutions have attended workshops designed to prepare them to administer the guides on their own campuses. This environmental assessment is a first step to sensitizing the entire campus to the needs and importance of adults as learners (Commission on Higher Education and the Adult Learner, 1985).

In a recent study of adult learners and non-traditional institutions, a welcoming environment was defined by adults as having a place where they felt they mattered (Schlossberg & Warren, 1985). Our evaluation revealed a recurring theme through the interviews. It was the importance of mattering. The interviewees felt they mattered to an instructor, to the institution, to the program. This has stimulated research into the concept of mattering. Rosenberg, a sociologist at the University of Maryland, suggests that mattering is a motive that has been overlooked. In comparing delinquents and non-delinquents, he found that non-delinquents feel they mattered to teachers, to parents, to meaningful others who are not delinquent (1981). Rosenberg further suggests that mattering is important to retirees. If individuals retire and no longer feel that they matter, they are not likely to be very well adjusted. We contrast this with the midlife kin-keepers, who matter too much sometimes, like top administrators who also matter too much.

Mattering appears to be an important notion, and we are beginning to study the degree to which adult learners feel they matter to those of us in higher education. That is, the degree to which they feel they are appreciated; the degree to which they feel they are missed when they are not in class; the degree to which they feel that their success is a reflection on the professor. We will soon have a Mattering Scale that can be easily administered to learners. It will help identify areas on the campus that need improving so that learners feel they matter. You know how important it is for you to feel you matter – when you come to a conference, when you go to a workshop, when you teach a course. You want to feel you matter, that you are appreciated by your boss and by the people you supervise. And if it is that important to you, imagine how important it is to adult students. So, whatever the particular technique or the trend or the attitude is, if basically you can make your adult learners – who come in all sizes, shapes, colours, ethnic identifications, religions – feel they matter, then you have been a success.

The subject of adult learners is fascinating and manageable. It is successfully understood and implemented through a combination of theory and practice – seasoned with a healthy skepticism toward long cherished stereotypes. We can do it and do it better.

Adapted from the Keynote Speech delivered at the National Academic Advising Association, October 12, 1986, U.S.A.

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Module 2

Module 2

Developmental Needs of the Adult Learner

-Biological Changes in Adulthood
-Intellectual Changes in Adulthood
-Psychological Changes in Adulthood
-Translating Developmental Changes into Instructional Designs
-Developmental Needs and Faculty Roles
-References
-Reprints

Developmental Needs of the Adult Learner

Preview

An understanding of the human life cycle and the developmental needs associated with it is crucial to facilitating adult learning. From the 25-year-old exploring the potentials of a new career, to the 35-year-old seeking professional competence for a promotion or job change, to the 45-year-old who wonders if there isn't more to life than long hours and family sacrifices, adults bring an incredible diversity of attitudes, values, opinions, interests and motivations to the learning situation. Each of these elements is ultimately linked to the intellectual, psychological, and emotional development of the individual.

Goals

In this module, you are invited to:

- Explore the biological, intellectual, and psychological changes that accompany the aging process
- Evaluate your role as an educator in light of the developmental needs of adult learners
- Articulate the developmental philosophy that influences your current approach to working with adults
- Evaluate the validity of one model for enhancing the personal growth of the adult learner
- Evaluate a conceptual model of challenge and support for enhancing adult development

Biological Changes in Adulthood

Key Issues

Increased scientific interest in the biological changes that occur after childhood have provided educators with one important knowledge base to support their efforts in teaching adults. Some of the major findings include the following:

- *Auditory Acuity.* The decline in hearing ability is one of the most significant biological changes in adulthood. This decline is gradual until the mid to late sixties, after which it becomes more marked (up to 65% loss in adults over the age of 65). Because this loss of auditory acuity can often interfere with normal conversation, older adults may lose confidence in their ability to interact with others and avoid new experiences. Increased anxiety about hearing loss may also interfere with the learning process.
- *Visual Acuity.* After the age of eighteen, adults usually experience a steady decline in visual acuity, with the most noticeable changes occurring between age 40 and 55. These changes include a loss of elasticity and responsiveness to light, a narrower field of vision, and structural defects in the eye itself. While most of these changes are correctable, classroom seating and lighting adjustments may be necessary to accommodate adults with such vision difficulties.
- *Speed and Reaction Time.* In general, reaction time decreases with age. Since it takes longer to perceive, process, and act upon information from their environment, it follows that the speed at which adults learn also decrease with age. Reaction time is normally not a critical factor in learning, particularly if learners have some control over the pace.

Adapted from The National Center for Research in Vocational Education. (1987). *Plan instruction for adults, Module N-1.* Columbus, OH: Ohio State University.

Questions

What provisions do you currently make for students experiencing the physical limitations described above? What other strategies could you implement to better accommodate these learners?

Intellectual Changes in Adulthood

Key Issues

While the concept of "intelligence" continues to be debated, there is some evidence to support the following generalizations regarding intellectual capacity and cognitive functioning in adulthood.

Learning Speed. Although the speed of learning may be reduced in some areas, the capacity to learn is generally not affected by age. Because the knowledge database of the adult is larger, it takes longer to scan that database and integrate new information into it. This may be why older learners tend to be less efficient at organizing complex information that younger learners.

Memory. While short term memory appears to decrease with age, long term memory appears to increase. The more meaningful the information, the more likely it is to be retained by an adult learner.

Judgment. Due to their reservoir of experience and finely-tuned reasoning ability, adults are generally able to make sounder judgments as they grow older. For reasons that are largely unknown, however, these same adults tend to perform less well than their younger counterparts in subjects requiring abstract or mathematical reasoning.

Questions

What are the implications of these intellectual changes on the performance of adult learners in the classroom? How can their weaknesses be accommodated? How can their strengths be utilized?

Adapted from The National Center for Research in Vocational Education. (1987). *Plan instruction for adults, Module N-1.* Columbus, OH: Ohio State University.

Key Issues

The most solid basis for understanding the motives, learning styles, and knowledge orientations of adult learners lies in the research concerning the psychological development of adults. Traditionally, this development has been characterized as a series of tasks or responses to age and changing social expectations. These responses, summarized in Table 2-1, form the basis for the classic life cycle theories of Neugarten (1968), Sheehy (1976), Gould (1978), Levinson (1978), and Erikson (1980).

With the developmental tasks of adulthood come changes in individual perceptions of and motivations for education. These various orientations are outlined in Table 2-2 (Individual Differences and Educational Practice). Note that the progression depicted in the table is one of movement toward increased self-evaluation, self-directedness, and increasing responsibility among adults for creating meaning out of their educational and life experiences (Chickering, 1976).

Although the educational motives and orientations of the adult learner are as diverse as the adult population itself, only those that relate to the first one or two developmental levels are addressed by most institutions of higher learning. Developing alternatives that are responsive to the more complex dimensions of adult development necessitates both a clearer understanding of this process and a commitment on the part of educators to integrate developmental concerns into existing curricula.

TABLE 2-1: DESCRIPTIONS OF LIFE-CYCLE PHASES

Phase and Age	*Marker Events*	*Psychic Tests*	*Characteristic Stance*
Leaving Home 18-22	Leave home Establish new living arrangements Enter college Start first full-time job Select mate	Establish autonomy and independence from family Define identity Define sex role Establish new peer alliances	A balance between "being in" and "moving out" of the family
Moving into Adult World 23-28	Marry Establish home Become parent Get hired/fired/quit job Enter into community activities	Regard self as adult Develop capacity for intimacy Fashion initial life structure Build the dream Find a mentor	"Doing what one should" Living and building for the future Launched as an adult
Search for Stability 29-34	Establish children in school Progress in career or consider change Possible separation, divorce, remarriage Possible return to school	Reappraise relationships Reexamine life structure and present commitments Strive for success Search for stability, security, control Search for personal values Set long-range goals Accept growing children	"What is this life all about now that I am doing what I am supposed to?" Concern for order and stability and with "making it" Desire to set long-range goals and meet them
Becoming One's Own Person 37-42	Crucial promotion Break with mentor Responsibility for three-generation family; i.e., growing children and aging parents For women: empty nest; enter career and education	Face reality Confront mortality; sense of aging Prune dependent ties to boss, spouse, mentor Reassess marriage Reassess personal priorities and values	Suspended animation More nurturing stance for men; more assertive stance for women "Have I done the right thing? Is there time to change?"
Settling Down 45-55	Cap career Become mentor Launch children; become grandparents New interests and hobbies Physical limitations; menopause Active participation in community events	Increase feelings of self-awareness and competence Reestablish family relationships Enjoy one's choices and life style Reexamine the fit between life structure and self	"It is perhaps late, but there are things I would like to do in the last half of my life" Best time of life
The Mellowing 57-64	Possible loss of mate Health problems Preparation for retirement	Accomplish goals in the time left to live Accept and adjust to aging process	Mellowing of feelings and relationships Spouse increasingly important Greater comfort with self
Life Review 65 +	Retirement Physical decline Change in finances New living arrangements death of friends/spouse Major shift in daily routine	Search for integrity versus despair Acceptance of self Disengagement Rehearsal for death of spouse	Review of accomplishments Eagerness to share everyday human joys and sorrows Family is important Death is a new presence

Sources: From, Cross, 1981, pp. 174-175.

Cross, K. P. (1981). *Adults as learners: Increasing participation and facilitating learning*. San Francisco: Jossey-Bass. Reprinted with permission.

TABLE 2-2: INDIVIDUAL DIFFERENCES AND EDUCATIONAL PRACTICE

Table 8. INDIVIDUAL DIFFERENCES AND EDUCATIONAL PRACTICE

Ego Development	*Moral Development*	*Intellectual Development*	*Motive for Education*	*What is Knowledge?*	*What Use is Knowledge?*
Self-protective Opportunistic	Obedience-punishment oriented	Knowledge (simple recall)	Instrumental; satisfy immediate needs	A *possession* which helps one get desired ends; ritualistic actions which yield solutions	Education to get: means to concrete ends; used by self to obtain effects in world
Conformist	Instrumental egoism and exchange; good-boy, approval oriented	Comprehension Application	Impress significant others; gain social acceptance; obtain credentials and recognition	*General information* required for social roles; objective truth given by authority	Education to be: social approval, appearance, status used by self to achieve according to expectations and standards of significant others
Conscientious	Authority, rule and social-order oriented	Analysis Synthesis	Achieve competence re competitive or normative standards. Increase capacity to meet social responsibilities	*Know how:* Personal skills in problem solving; divergent views resolved by rational processes	Education to do: competence in work and social role; used to achieve internalized standards of excellence and to serve society
Autonomous	Social contracts, legalistic orientation Moral principle orientation	Evaluation	Deepen understanding of self, world, and life cycle; develop increasing capacity to manage own destiny	Personally generated *insight* about self and nature of life; subjective and dialectical; paradox appreciated	Education to become: self-knowledge; self-development; used to transform self and the world

Where does Knowledge Come From?	*Learning Processes*	*Institutional Function*	*Teaching Practice*	*Student-Teacher Relationships*	*Evaluation*
From external authority; from asking how to get things	*Imitation;* acquire information, competence, as given by authority	Arouse attention and maintain interest; to show how things should be done	Lecture-exam	Teacher is authority, transmitter, judge; student is receiver, judged	By teacher only
From external authority; from asking what others expect and how to do it		Provide predetermined information and training programs; certify skills and knowledge	Teacher led; dialogue or discussion		By teacher only
			Open "leaderless" "learner centered" discussion	Teacher is a "model" for student identification	By teacher and peers
Personal integration of information based on rational inquiry; from setting goals; from asking what is needed, how things work, and why	*Discover* correct answers through scientific method and logical analyses; multiple views are recognized but congruence and simplicity are sought	Provide structured programs which offer concrete skills and information, opportunities for rational analysis, and practice, which can be evaluated and certified	Programed learning; correspondence study; televised instruction	"Teacher" is an abstraction behind system. Student a recipient	By system
Personal experience and reflection; personally generated paradigms, insights, judgments	*Seek new experiences;* reorganize past conception on the basic of new experiences; develop new paradigms; create new dialectics	Ask key questions; pose key dilemmas; confront significant discontinuities and paradoxes; foster personal experience and personally generated insights	Contract learning: 1. Time, objectives, activities, evaluation negotiated between student and teacher at the outset and held throughout	Student defines purposes in collegial relationship with teacher; teacher is resource, contributes to planning and evaluation	By teacher, peers, system, self; teacher final judge
			Contract learning: 2. Time, objectives, activities, evaluation defined generally by student, modifiable with experience		By teacher, peers, system, self; self final judge

Note: Just as each developmental stage incorporates and transforms earlier stages, so also each subsequent learning process and

Chickering, A. W. (1976). Developmental change as a major outcome. In M. T. Keeton (Ed.), *Experiential Learning* (Table 8). San Francisco: Jossey-Bass. Reprinted with permission.

Article

The stages described in Table 2-2 and by life cycle theories in general are useful in anticipating the "marker events" or transitions that adults encounter in their lives (Chickering & Marienau, 1976). These transitions produce the disequilibrium necessary for adults to re-examine and if necessary restructure their lives in a constructive manner. In the following article, Sheckley (1987) describes these transitions as providing a "zone of learning" through which personal growth can occur. Read the article, which is reprinted at the end of this module. Then return to this page and answer the questions that follow.

Sheckley, B. G. (1987). Adult development: A learning perspective. *CAEL News*.

Questions

Cross (1981, p. 240) states that the role of educators is to challenge the learners to move to increasingly advanced stages of personal development. Do you agree with this statement? Why or why not? How important is this role relative to other educator roles?

Questions

In what way(s) have you tried to assess the developmental needs of students in the past? Would you consider your efforts successful? Why or why not?

Questions

Which of the growth dimensions described by Sheckley do you feel should be addressed in your curriculum? How can you encourage adult learners to expand along these dimensions?

Translating Developmental Goals into Instructional Designs

Key Issues

Acknowledging the importance of developmental needs is one matter, modifying instruction to accommodate these needs is quite another. One model which attempts to address this dilemma has been proposed by Lee Knefelkamp (1984) and her associates. The Practice-Theory-Practice (PTP) model prescribes a process of instructional design based on an analysis of student learning characteristics. It is based on Perry's model of intellectual development and the assumption that developmental growth is fostered best in an environment that provides a balance of challenge and support (Knefelkamp, 1984, p. 1). The following chart shows how the correlation between the learning environment and an individual's cognitive development or learning style provides a basis for determining this balance.

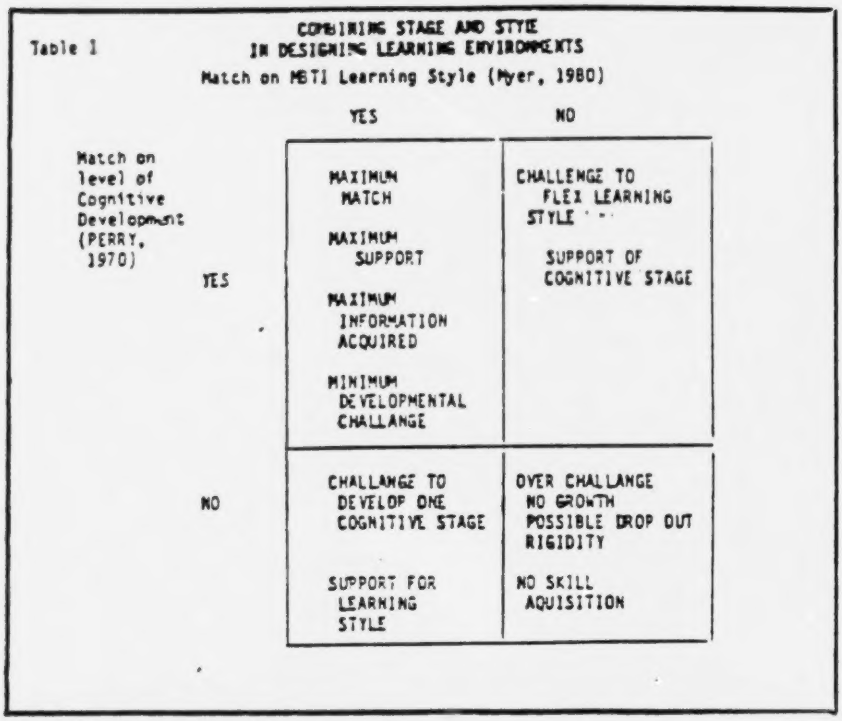

Table 1

COMBINING STAGE AND STYLE
IN DESIGNING LEARNING ENVIRONMENTS

Match on level of Cognitive Development (PERRY, 1970)		Match on MBTI Learning Style (Myer, 1980)	
		YES	NO
	YES	MAXIMUM MATCH MAXIMUM SUPPORT MAXIMUM INFORMATION ACQUIRED MINIMUM DEVELOPMENTAL CHALLANGE	CHALLENGE TO FLEX LEARNING STYLE SUPPORT OF COGNITIVE STAGE
	NO	CHALLANGE TO DEVELOP ONE COGNITIVE STAGE SUPPORT FOR LEARNING STYLE	OVER CHALLANGE NO GROWTH POSSIBLE DROP OUT RIGIDITY NO SKILL AQUISITION

Adapted from Cornfeld, J. & Knefelkamp, L. (1979, March). *Combining student stage and style in the design of learning environments : Using Holland typologies and Perry positions.* Paper presented at ACPA, Los Angeles.

Questions

According to Knefelkamp, the concept of instructional challenge and support explains why some courses are overwhelming to the students. Is this claim supported by your experiences as an educator? Why or why not?

Questions

What are the limitations in implementing the PTP model? How can you provide instruction that differentially challenges and supports each student according to individual developmental needs?

Activity

Knefelkamp (1984) suggests that there are four variables in the learning environment that can be modified to challenge or support student development.

- *The degree of* ***structure***
- *The degree of* ***diversity*** *in learning tasks*
- *The degree to which* ***experiential learning*** *is concrete or vicarious*
- *The degree to which instruction is* ***personalized***

Students characterized by dualistic (right-wrong) thinking, for example, find concrete experience a support variable and diversity a challenge variable.

1. Consider the kinds of strategies you use to challenge and support such an individual. What would they be? Note specific suggestions in the space below.

2. Now consider what kinds of strategies you would use with an adult learner who is in transition to a higher stage of personal and intellectual development. What kinds of strategies would support such a person? What kinds of strategies would be challenging?

Developmental Needs and Faculty Roles

Key Issues

The Knefelkamp model provides a systematic approach to translating developmental needs of adult learners into instructional designs. However, it is the instructor who is ultimately responsible for orchestrating classroom variables in a way such that personal growth and development is encouraged. What impact does this kind of activity have on the traditional roles of instructors? What kinds of supports and challenges can they themselves expect in this new role?

Article

The next article, reprinted at the end of the module, summarizes some of the issues related to adult development and attempts to answer these questions. After reading the article, return to this page and answer the questions that follow.

Steitz, J. A. (1985). Issues of adult development within the academic environment. *Lifelong Learning.*

Questions

Which of the authority styles describes how you relate to students? Does this role differ when you are dealing with adult students? If so, how?

Questions

How do you deal with an adult student who has a developmental need to assert his or her competence? How effective is this approach?

The concepts presented in this module provide a starting point for evaluating your present teaching style and strategies in view of the unique developmental needs of the adult learner. Some of these concepts will be raised again in Module 10, as specific teaching strategies for adult learners are discussed.

In the next module, the perspective will shift from the classroom to the institutional level as you explore those developmental factors that influence an adult's motivations to return to school.

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ADULT DEVELOPMENT: A LEARNING PERSPECTIVE

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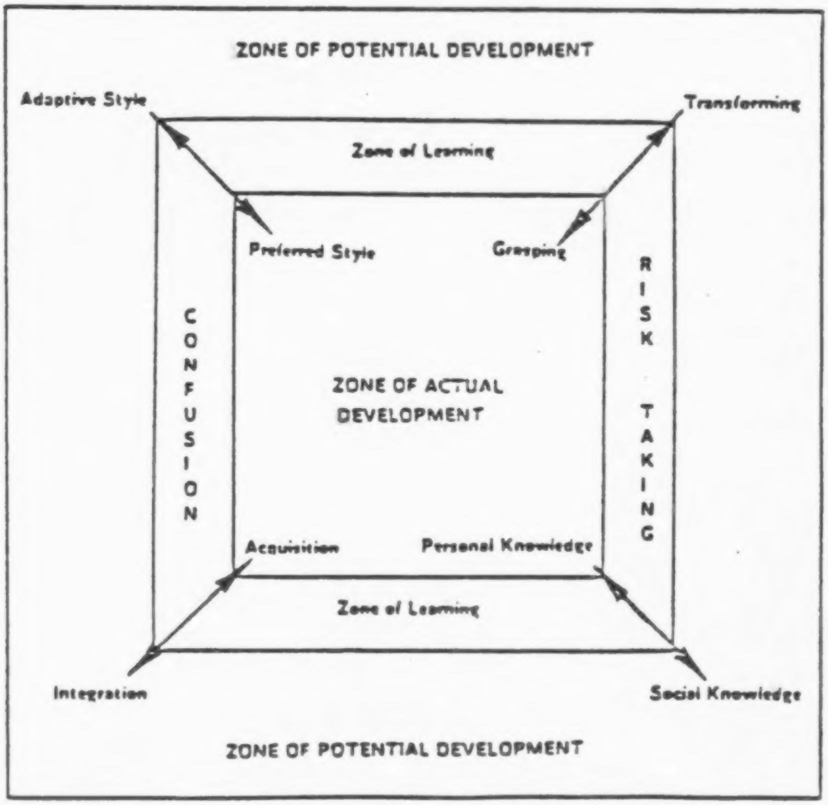
ADULT DEVELOPMENT: A LEARNING PERSPECTIVE

Despite the recent explosion of research, the exact process of adult development has not been isolated. Phase theorists (e.g., Gould, 1978) assign age boundaries to each developmental phase while life structure theorists (e.g., Levinson, 1978) emphasize external relationships to society. Cognitive researchers (e.g., Perry, 1970) describe adult development in terms of increasingly complex cognitive and moral reasoning structures. Other writers (e.g., Schlossberg, 1984) eschew the stage-phase concept to emphasize adaptive transition processes.

Although the models offer insightful perspectives on learning programs for adults at specific developmental stages/phases, they do not offer enough guidance on how to promote development in classroom settings. Most of the frameworks treat classroom learning as a factor which must vary as a function of the stage/phase of development. They do not treat learning as an independent factor promoting more complex ways of knowing.


ZONE OF POTENTIAL DEVELOPMENT
Adaptive Style
Transforming
Zone of Learning
Preferred Style
Grasping
RISK TAKING
CONFUSION
ZONE OF ACTUAL DEVELOPMENT
Acquisition
Personal Knowledge
Zone of Learning
Integration
Social Knowledge
ZONE OF POTENTIAL DEVELOPMENT

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Learning is the key to adult development (Kolb, 1984). Capabilities students demonstrate without any assistance, the "zone of actual development", expand toward the "zone of potential development" represented by capabilities an adult can demonstrate with careful guidance by an instructor (Figure 1). The value added measure of learning in a course is growth of the "zone of actual development" to include portions of the "zone of potential development."

Classroom activities focus on the terrain, or "zone of learning," adults traverse on their developmental journeys. Progress through the learning zone is usually completed in two separate steps as old useful habits (like using a typewriter) are reluctantly abandoned in favor of more complex skills (like using a word processor). The first step is a risky venture from a relatively secure world to one where new knowledge or skills result in unsettling confusion. Only after working with the new learning is the second step completed and a higher level of sophistication achieved.

While the trip through the learning zone is complex and personal, the teacher of adults can help adult learners by bridging the continua of personal knowledge<-->social knowledge, grasping<-->transforming, preferred learning style<-->adaptive learning style, and acquisition <--> integration.

PERSONAL KNOWLEDGE <--> SOCIAL KNOWLEDGE. Knowledge is composed of a constant interplay between the knowing of personal experience (personal knowledge) and the knowing of collective experience (social knowledge). Capra (1983) decries the bias that objective social knowledge is more valuable than subjective personal knowledge. As Samuel Coleridge observed, the two are intertwined: "During the act of knowledge itself, the objective and subjective are so instantly united that we cannot determine to which of the two the priority belongs."

The interplay between personal and social knowledge is an important component of the developmental process. Individual personal knowledge is the basis for acceptance and understanding of objective, social knowledge. Conversely, social knowledge challenges and broadens ideas limited by the perspectives and experiences of personal knowledge. Instructors of adults can facilitate this interplay by utilizing knowledge gained from experience as the basis for exploring "objective" principles. Assessment of prior learning is an important tool in this process.

GRASPING <--> TRANSFORMING. According to the experiential model (Kolb, 1984), learning is a process whereby information is "grasped" through concrete experience (CE) or abstract conceptualization (AC) and then "transformed" via reflective observation (RO) or active experimentation (AE). Accordingly, experiential learning shifts emphases of adult learning programs from memorizing a body of knowledge to honing transforming skills needed to promote adult development. When experienced adult learners are involved, an exclusive focus on information acquisition is not always appropriate. If development is to be the major outcome of adult learning activities, program designs have to allow for important transforming activities like reflective learning to extract meaning from past experiences or experimental learning to test out new ideas and capabilities.

PREFERRED LEARNING STYLE <--> ADAPTIVE LEARNING STYLE. The active process of experiential learning allows for individualized grasping and transforming patterns, or "learning styles" (Kolb, 1984), which outline four differentiated paths to greater

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complexity. The diverger journeys through a terrain of increasingly complex values, the assimilator through a countryside of advancing symbolic complexity, the converger through a landscape requiring more complex solutions and decisions while an accommodator traverses a route of expanding behavioral complexity.

Each traveler soon discovers that strengths developed for travel in their homeland are ill suited for travel in other regions. Their respective journeys require combinations of a diverger's valuing skills, an assimilator's thinking skills, a converger's deciding skills and an accommodator's acting skills. A major task of developing complexity among adult learners is to expand upon habitual, preferred styles and promote greater adaptability of learning approaches.

ACQUISITION <--> INTEGRATION. The final path to development involves the acquisition--integration continuum. Promoting integrative learning in a classroom requires a developmental framework which allows students to acquire information, interpret it and integrate it. When learning is treated exclusively on the acquisition level, important interpretation and integration activities, so essential to lifelong learning, are not available.

As depicted in Figure 1, learning provides the key to adult development. In classroom settings, development can be fostered by traversing the continua of personal knowledge <-->social knowledge, grasping<-->transforming, preferred learning style<-->adaptive learning style, and acquisition <--> integration.

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By Jean A. Steitz

Issues of adult development within the academic environment

Many institutions of higher education are still dealing with the issues of how best to provide age-integrated education. While most institutions have already begun to make structural changes (i.e., late afternoon and night classes) to accommodate both working traditional-aged students and middle-aged adult students, there is still a need for more application of what is known about the adult life stage within the academic environment. Accommodating adult students within higher education provides an institution, staff and professors an opportunity to examine basic issues such as the nature and purpose of higher education, the social and community role of educational institutions and academic isolation. Even with an understanding of these issues adult students will not march to the same teaching methods and institutional procedures designed for traditional-aged students preparing for, rather than already engaged in, society (McDermott, 1975). In short, accommodating adult students necessitates changes in practice as well as structure and this is not always easy for either the adult students or the professors.

The purpose of this article is to discuss from a developmental perspective, issues surrounding the middle-aged adult student experience within institutions of higher education. Three topics are addressed: (1) cognitive abilities and needs, an expanded role for professors, (2) the academic normative environment versus the adult normative environment, and (3) professor and adult student relationships within the context of power and authority.

Cognitive Abilities and Needs

Almost all returning adult students are quite fearful and hesitant in their initial return to the classroom (Herr, 1984). The longer they have been away from the classroom, the more they lack trust in their previous academic backgrounds, their basic skills of reading, writing, and mathematics, and their ability to compete within the academic environment. Yet, developmental research indicates that the cognitive abilities of most middle-aged adults have increased since young adulthood and will remain relatively stable throughout the adult life course (Schaie & Labouvie-Vief, 1974). The middle-aged adult has also made more commitments and decisions as to the structure of his or her life course (e.g., marriage, occupation, leisure interests) than the traditional-aged student. As a result, the adult students in comparison with younger students are often more motivated and better able to maintain interest in academic learning. This in turn results in high performance on the part of adult students.

There are qualitative differences between middle-aged adult students and traditional-aged students in the way they respond to academic information and tasks. However, these qualitative differences are due primarily to differences in environmental demands made upon the adults compared with traditional-aged students, rather than innate capabilities.

Traditional-aged studenis, concerned with the initial acquisition of information and skills, often tackle a task, no matter how trivial, in order to develop and demonstrate the information or skill acquired (Schaie, 1977-78). In their academic training, they have often been assigned academic tasks for which the real-life relevance is obscure, the material theoretical and abstract to the point of being stripped of functional meaning. Yet, they generally have not had the life experience or status necessary to question the utility of such tasks and have quickly learned that success or failure depends upon an abstractness of thought applied to a broad range of academic situations (Labouvie-Vief, 1982).

In the classroom, the traditional-aged student can focus on detail without regard to meaning or functional utility. They also are better able to focus on speed and quantity of questions answered in a testing situation and allow risk on accuracy and quality. This can be beneficial in pressurized assessment situations, where tests are timed and/or tests accent detail and restricted meaning such as multiple-choice tests.

The adult's years of attending to

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problems in a pragmatic fashion, looking for real-life relevance and practical payoff, results in a different view of academic situations. Middle-aged adults, have adapted more to a world that makes a number of demands upon their attention and therefore have developed pragmatic strategies to limit information to manageable proportions and even to limit those tasks with which time is spent. Many adult students may simply refuse to cooperate in academic situations unless there is relevance and meaning to the task (Labouvie-Vief & Chandler, 1978). In addition, the older the adult the more they are partially disadvantaged in academic environments with tasks, substantive information and skills, devoid of functional utility, due to their higher need for meaning or relevance (Labouvie-Vief, 1977).

In assessment situations, adults are more cautious and less likely to take risks such as guessing an answer. They also take time in order to do well. Because of this, adults often appear to be motivated more to avoid mistakes than to succeed at a task. On multiple-choice tests, as one example, adults in contrast to young people will be more likely to not answer a question at all unless they are sure of the answer, even if there is no penalty for guessing (Botwinick, 1978; Zelinski, Schaie, & Gribbin, 1977). Hence, some kinds of testing situations handicap adults by pressurizing the environment, focusing on speed by placing time limits on tests, or by restricting response meaning.

Adult students who are no longer in the acquisition phase of learning, tend to be more interested in the relevant application of the information (Schaie, 1977-78), and often have had life experiences necessary to challenge, from a pragmatic position, a professor's material. In addition, an adult's sense of personal competence and worth is based in large measure upon how their specific work and life situations have been personally handled. Indeed, the cognitive interpretation of life and the discerned use of one's developed strategies compose the central theme of adulthood (Neugarten, 1968). In an academic classroom, the adult student who has worked or is working in an area related to the subject matter under discussion almost has a developmental task to verify his or her competence or worth by pointing out to the professor and class which specific parts of the material presented will pragmatically work and which parts are irrelevant.

These adult students can be quite cognitively challenging and assertive in the classroom, even cognitively hostile, especially if they have had direct "on the pavement" experience with the material to be learned and/or they feel that the academic material being presented is too theoretical, not applicable or pragmatic. If professors are aware of these adult students' developmental needs to feel competent, their goals and the goals of the adult students can blend together to the benefit of the entire class, blending theory and application, or global information with specific examples or facts.

A professor's role for adult students needs to go beyond that of being a straight theoretician to that of also being a facilitator of practical applications of theory and cognitive guide (Houle, 1974; Huberman, 1974). A professor often needs to be able to cognitively guide adult students who are more bound by their specific life experiences to other alternative interpretations of situations and environments and to arrays of alternative strategies for handling specific situations and environments that stem from theory, yet are also pragmatic.

This role for professors was not often demanded when traditional-aged students were alone in the classrooms because the students lacked the essential practical experiences and learning that come with age. However, both traditional-aged students and adult students benefit from this expanded role for professors (see for example Jacobson, 1984).

The Academic Environment

Student and Adult Status

Another major factor that affects adult students is the academic normative environment which is distinctly different from the traditional adult normative environment. Middle-aged adults outside of the academic environment hold a key position in the power structure of society. Society accords adults, due to their social age status, full cultural power in terms of social, institutional, and economic privileges (Neugarten & Hagestad, 1976). A portion of adults' self-esteem is based upon their earned and recognized social status vis-a-vis young people, their marital status, their parental status, their social standing in the community, their friends and associates, their professional contacts, and their economic position. In the academic normative environment, adult students lose their earned social status and they lose the external props or supports by which they can hold themselves in esteem (see Schlossberg, 1984). Only the professor and the "academic system" have recognized social status within the academic environment.

Many adult students when they first return to the classroom, normally need to allow time for their egos to readjust to the situation of being treated as an unknown, without a prior history, as beginning on the same level as all others in the classroom. For most adults their last experience with this type of situation was in youth and they need time to reintegrate this youth-type situation and their position in it from their position as adults. However, some adult students require little adjustment, they enjoy the chance to prove themselves in a totally new normative environment. They leave their past, job situations, family situations, and community situations at the college door and enter the academic environment as a new person who is to be judged by different standards than those of the outside world.

Professor—Adult and Student Roles

Within the academic community, students regardless of age, are traditionally throught of as children or young adults. They are not seen as independent but as dependent on authorities and needing the expert guidance of professional scholars and/or bureaucratic staff (Schlossberg, 1984). Only the professor has recognized status as an independent adult professional. The status of student is the lowest status in the academic community. Rights and privileges are accorded to students by professors based not upon where the adult students have been or what they have done prior to entering the classroom, but upon how adult students compete according to the structure created by the professor (tests, assignments, materials) and with others in the classroom. The professor is in control of the environment and regulates the interactions within the environment. The professor is in an authority or parent-type socializer role. The student, regardless of age, is in a relatively powerless, child-type, trainee role.

On a micro level, the situation exists for either the professors or the adult students to have difficulty with their respective role positions. Regarding the adult student, three types of problem situations can be delineated. First, some adult students have difficulty deferring on any issue their own personal authority status to another adult and resent the other adults' legitimated authority role as professor. This is most apt to occur when there is a nontraditional arrangement of authority positions and gender or age, for example, male student-female professor, or middle-aged female student-young female professor.

Second, some adult students, especially women, have difficulty in dealings with any authority figure and tend to attribute too much control to the professor and too little to themselves in terms of ability to question or achieve. The adult students in this case have difficulty with both their anxiety levels and their overcautiousness. The more the adult can reach out, talk with the professor, ask questions, risk someone thinking "he or she is stupid," the more the adult will adjust, compete, and succeed.

Third, some adult students as well as some traditional-aged students refuse for one reason or another to attend to the nature of the academic task. They may spend "time" with a course, but it is not time that is related to the specific grade or success contingencies operating in the course. These students, for example, will not attend to material specifically noted by a professor as important for a test because they did not find it interesting, or it was too long. These adults and young people need to reassess their motives for taking the course and whether or not they are being realistic in their expectations about school.

Three types of situations can also be attributed to the professor's style of authority or adult socialization (see Baumrind, 1972, 1980). First, some professors have difficulty sharing their power positions. They are authoritarian with regard to the classroom interactions. They have the "right" answers and the "important" questions. In the extreme, these professors allow little give-and-take in a classroom, relying exclusively on a lecture-listener based format with few or no questions from students. This type of style tends to foster too much self-restraint and group conformity and little independent learning on the part of students of any age.

Second, some professors have difficulty with maintaining any authority position. They make few demands on the students in terms of assignments or tests. Often the class is student run with little intervention by the professor. They have a laissez-faire attitude with regard to grades, standards, notions of adequacy, value, or "truth." Students under this type of tutelage, regardless of age, get little substantive material and/or little guidance in terms of ability to judge the worth or quality of the material. They show a form of academic immaturity and inability to direct or assume leadership in subject matter areas.

The third authority style requires the most involvement from a professor. These professors have the ability to maintain their authority-based power position in the classroom, yet nurture the personal authority and academic power inherent in each of the students, regardless of age. They are not afraid of their leadership position and are involved with their students by placing limits, demands, and controls on their learning behaviors. These professors are viewed as being more authoritative than authoritarian. They focus on where the students are coming from, yet set standards and notions of adequacy, value, or "truth" through extensive reasoning and verbal (and written) give-and-take. This style promotes the highest potential for independent learning and academic competence on the part of students, regardless of age (Baumrind, 1972, 1980).

On a more macro level, regardless of role positions within the academic community, both adult students and professors are in the adult life stage where they are both dealing with critical issues of authority versus self-absorption (Erikson, 1982). The corresponding strength stemming from this struggle is "production," and the basic virtue, "care." The nature or degree of production and care the adult, professor or student, is capable of utilizing is dependent on the issues resolved relative to their own attitudes of authority developed. The healthy adult according to Erikson, has the ability to avoid the stereotypic ritualism common to the adult life stage called authoritism or the ungenerous (uncaring) and ungenerative (unproductive) use of sheer power for the regimentation of life.

Professors who are having difficulty in their own lives resolving the developmental challenges of the adult life stage, can feel threatened by the presence of an adult student who is in the same life stage, or vice versa. Professor and adult students who are at equivalent levels of resolving the authority issues of the adult life stage are more compatible than professors and adult students who are at different levels. When this occurs both adults have an unrestricted perception of their own scholastic authority and power as well as that of the other. Either adult has the capacity to admit a mistake and acknowledge another's capability without loss of legitimate authority or sense of competence. Hence, either adult is able to transcend the self-absorption discussed by Erikson (1982) and feel a sense of merit or production and care for the other as well as for self.

Conclusion

Despite the fact that midlife adults are active producers and consumers of higher education, little is known about the experiences of adult students both within the traditional academic environment and with professors who are also in the adult life stage. Faculty members in institutions of higher education need to become more sensitive to the cognitive developmental issues and power and authority issues that occur along the adult life course and the role that they can play in facilitating both adult development and learning (Huberman, 1974; Schaie & Willis, 1978; Sprinthall & Thies-Sprinthall, 1983).

Specifically, faculty members need to attend to the adult student's high need for meaning and relevance regarding procedures as well as subject matter to be learned. Faculty members need to be prepared to recognize and logically answer adult students' questions and challenges as to meaning and relevance of procedures and essential subject matter. Indeed, faculty members need to encourage and facilitate adult students both individually and as a group in such cognitive interactions.

Adult students need to be recognized within the academic environment as mature and experienced adults as well as pursuers of academic knowledge or training (i.e., as students). In turn, faculty members need to become more authoritative with regard to their course management. Specifically, they need to actively set goals and academic standards, yet encourage and facilitate adult challenges and interaction. Adult students need to be allowed and encouraged to voice their relevant experiences and opinions. Adult students also want feedback on their experiences and opinions. In addition, faculty members need to establish a more symmetric authority and power arrangement in classrooms with adult students. Such an arrangement would necessitate openness, flexibility, and ability to handle modification and personal growth.

Professors need to be more aware that they differ in terms of their abilities to be adequate facilitators of adult development and learning. Sensitivity to the context of power and authority present within institutions of higher education and to the diversity of developmental changes and issues which occur during the adult life course, can not only enhance the quality of the educational experience and facilitate the counseling process for adult students, but also aid efforts in professional staff development. **AAACE**

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Module 3

Module 3

Educational Needs of the Adult Learner

–Why Adults are Returning to School
–Factors that Influence the Re-entry Decision
–Overcoming the Barriers to Re-entry
–References
–Reprints

Educational Needs of the Adult Learner

Preview

The demand for education oriented to the needs of the adult learner has become a major societal force in the world today. While it threatens to overload conventional educational resources, it also has the potential to lead us into new educational frontiers by meeting K. Patricia Cross' goal of achieving "education for each" by the end of this century (1976, p. 3-4).

To meet this challenge, educational institutions must be both sensitive and responsive to the special barriers faced by adults returning to school. These barriers, which are both personal and institutional, will certainly involve a re-examination of both traditional teaching practices by faculty and re-entry services provided by administrative staff. This module will explore these barriers as well as appropriate institutional responses.

Goals

In this module, you are invited to:

- Forecast future demands for adult education based on current societal trends
- Project the changes that will be needed if higher education is to meet the challenges presented by the working adult
- Evaluate the impact of institutional and personal barriers on the re-entry adults' participation in formal education
- Recognize those barriers to adult learners that exist in your own institution

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Why Adults are Returning to School

Key Issues

It has been known for some time that adult learners are lifelong learners. In a study of the educational pursuits of adult learners, Tough (1979) found that the average adult spent 700 to 800 hours each year completing eight separate learning projects. Although the vast majority of this learning occurs outside of the classroom, the number of adults returning to school is increasing significantly. According to the Center for Educational Statistics, between 1970 and 1985 the number of persons 25 and over enrolling in insitutions of higher learning increased by 114 percent.

In exploring the reasons for the influx of adults into the academic setting, there appears to be at least three forces at play:

- *Advances in technology which make present scientific and technical knowledge quickly obsolete*

  Scientific and technical information has been increasing at about 13% per year, doubling every five years. This rate is expected to increase to 40% (Naisbett, 1982).

- *Changes in the workplace which signal a shift from an industrial society to an information state*

  The explosion of information is being matched by a rapid increase in the number of people who work with it. Whereas 17% of the American workforce -- managers, bankers, programmers, teachers, etc. -- was employed in information jobs in 1950, at least 60% had similar jobs in 1982.

- *A growing recognition by the individual worker that re-education and re-training is the key to ensuring employment and employability; in other words, learning and earning are related*

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> *"The more people know, the more often they will go back to school throughout their working lives. The more people have learned--the more they come to rely on organized learning--the more they get into the habit of going to school. But also, the more they know, the more conscious they are of their ignorance."*
>
> Peter Drucker, *The Age of Discontinuity*

Article

The following article discusses some of the issues faced by educational institutions with respect to these demographic and societal changes. Read the article, reprinted at the end of the module. Then return here and answer the questions that follow.

Swift, J. S., Jr. (1986, February). Lifelong learning: A call to action by higher education. *Lifelong Learning*.

Questions

What kinds of trends have you observed with respect to the adult learner in your experience as an educator? What developments do you predict for the future?

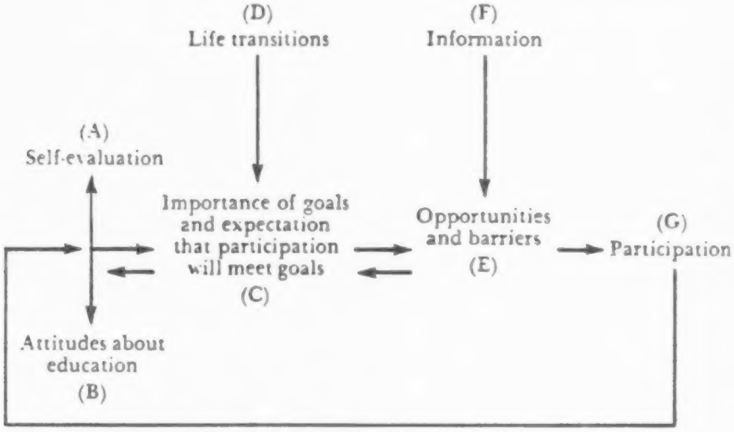
Question

In broad terms, what kinds of changes are indicated if institutions of higher learning are to meet the challenges presented by the re-entry adult?

Factors that Influence the Re-entry Decision

Key Issues

What is it that makes some adults return to higher education while others do not? In her book *Adults as Learners* (1981), K. Patricia Cross proposed a model for understanding why adults participate in formal learning activities. The model is based on the assumption that participation in educational activities is actually a chain of responses, each based on an evaluation of the position of the individual in his or her environment (Cross, 1981, p. 125). Note that at the outset, the individual's decision is predominantly influenced by personal factors, while external factors become more important as he or she progresses through the chain.


(D)
Life transitions
(F)
Information
(A)
Self-evaluation
Importance of goals and expectation that participation will meet goals
(C)
Opportunities and barriers
(E)
(G)
Participation
Attitudes about education
(B)

Cross, K. P. (1976). *Adults as Learners: Increasing Participation and Facilitating Learning*. San Francisco: Jossey-Bass. Reprinted with permission.

Each of the factors presented in the model is explained in more detail below:

A. *Self-evaluation.* Research shows that people who lack confidence in their abilities avoid putting themselves to the test and are unlikely to volunteer for learning that may threaten their self-esteem.

B. *Attitudes about education.* These attitudes arise from the individual's own past experience and indirectly from the attitudes and experiences of friends and "significant others," and those of reference and membership groups.

C. *Importance of goals and the expectation that participation will meet goals.* If a goal that is important to a person is likely to be achieved through further education, then the motivation at point C is strong. If either the goal is unimportant or the likelihood of success is in doubt, motivation will decrease accordingly.

D. *Life transitions.* These include periods of change calling for adjustment to new phases of the life cycle as well as sudden and dramatic changes such as divorce or loss of employment which trigger a latent desire for education into action.

E. *Opportunities and barriers.* If the individual reaches point E with a strong desire to participate, their motivation will encourage them to seek out special opportunities and overcome most barriers.

F. *Information.* It is at this point that critical information is needed to link motivated learners to appropriate opportunities. Without accurate information, point E is weak because opportunities may not be discovered and barriers loom large.

G. *Participation.* A variety of conditions must be met before the adult actually participates in formal learning. Many of these conditions involve overcoming institutional, situational, or personal barriers, many of which are described below:

- *Institutional Barriers:* Educational procedures and practices that prevent or discourage adult learners. These include policies and procedures regarding application, admission, enrollment, transfer of credit, class scheduling, etc.

- *Situational Barriers:* Obstacles arising out of one's situation in life at a given time. For example, children needing care or supervision, transportation to classes, financial constraints, etc.

- *Dispositional and Personal Barriers:* Personal concerns frequently pose greater obstacles to returning to school than either institutional or situational barriers. Almost all adult learners struggle at some point with one or more of the following types of concerns:

  - *Time:* Finding time for education in a day full of activity is the most commonly reported obstacle for adults returning to school. Disorganization or poor management of time is rarely the cause. Rather, it is the busy, complex life they lead, with its many role expectations. Almost all adult learners must learn how to juggle the various demands, responsibilities, commitments, distractions, and preoccupations which make up their life--in order that time can be set aside for educational pursuits.

  - *Lack of Self-Confidence:* Apprehension about the unknown is understandable as adults begin a new educational experience. New students very commonly experience academic insecurity and question whether their skills and abilities will be adequate. "Can I do it?" "Am I too rusty?" "Will I fit?"

- *Family Reactions:* The return to school marks a change for all members of the family. Initial support for a decision to return to school may dwindle when the reality of the commitment becomes apparent. Adult learners even face resentment or other guilt-producing feelings as they find less time to meet the needs of family and/or friends. Although these feelings typically subside after family members have time to adjust to the change, an unsupportive or more actively resentful family may be a continuing obstacle.

Questions Of these barriers, which do you think are most frequently encountered by the re-entry adult? Why?

Questions Of these barriers, which do you think are most difficult for re-entry adults to overcome? Why?

Overcoming the Barriers to Re-entry

Key Issues

For educators to have an impact on the barriers confronting adults returning to school, they must look closely at the instructional and institutional services they provide. Upon examining the environment provided by most traditional institutions of higher learning, it becomes apparent that many of these services either fail to accommodate or directly oppose the needs of adult learners.

The information in the following table illustrates the conflict between traditional institutional services and the needs of the re-entry adult. Programs and strategies for addressing these needs will be discussed in Module 4.

Question

Which of the needs outlined in Table 3-1 do you consider most critical for your institution?

Question

Which of these needs are currently being addressed in your institution?

TABLE 3-1: THE NEEDS OF ADULT LEARNERS IN CONTRAST TO USUAL CHARACTERISTICS OF THE HIGHER EDUCATIONAL ENVIRONMENT

Adult Learner	Higher Education Environment
Adult learners possess characteristics that are both similar and dissimilar to traditional learners.	Adult learners often are viewed as identical to traditional students and no program adjustments are made.
Adult learners need to be recognized, legitimized, understood and deserve institutional response.	Adult learners are often neglected; the image of college students is the resident 18-24 year old student.
Adult learners are not a uniform type. They can best be characterized by their heterogeneity.	The campus environment treats all students--including adult learners--the same way.
Adult learners have developmental and maturational skill building needs, as well as service needs.	Programs for adult learners frequently center on a narrow range of counseling and advising services.
Adult learner interests may revolve around multiple roles not necessarily centered on campus.	Competing priorities for student's time are often seen as a lack of commitment to higher education.
Adult learners expect good teaching and structured identification of tasks and process.	Faculty care about good teaching but generally are not trained in teaching skills; class goals and tasks are not explicitly outlined.
Adult learners have pragmatic concerns and plan their learning in a self directed manner.	Curriculum assumes students require extrinsic motivators and are not capable of setting own learning agenda. Curriculum oriented to knowledge acquisition and not practical application.
Adult learners expect pragmatic vocational preparation and skill development that will lead to a good/better job.	Few attempts are made to relate classroom learning to vocational preparation or career applications.

Adult learners have many demands on their time and may need flexibility in schedules to complete assignments and requirements.	Programs and academic calendars are usually inflexible, are built around specific timelines (e.g. semesters) and assume full time study.
Adult learners live in communities away from the campus.	Programs and services are done primarily on campus. Facilities and services often are not available in the evenings or at satellite centers.
Adult learners have a great need for a clear, precise campus information system, both formal and informal.	The decentralized structure of most campuses means that information dissemination is scattered or frequently done by word of mouth.
Adult learners need meeting places that afford social opportunities or quiet settings for study and relaxation.	If such space exists, it often is only in one central place like a student union.
Adult learners need opportunities often associated with residence on campus--more time with faculty, more intensive peer interaction time, and a closer integation of their living and learning experience.	Most opportunities to meet interpersonal needs are informal outside classrooms and require student's initiative.
Adult learners remain embedded within their peer or family culture/patterns.	Student services do not support family role responsibilities and commitments.
Adult learners live in communities as citizens. These communities place demands and responsibilities on students and therefore afford them citizenship rights.	Higher ed doesn't acknowledge this citizenship as legitimate and does not assist in making linkages between classroom learning and these off-campus responsibilities.

Adult learners have a rich array of prior experience in many life roles.	Curricula and courses usually assume no prior learning and/or do not incorporate prior learning into curricula content; advising process does not assist adult learners relate prior learning to plan of study.
Adult learners have ongoing role/status transitions relating to their education.	Support services provide a narrow range of assistance based on the needs of the 18-24 age group.

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By John S. Swift, Jr.

Lifelong learning: A call for action by higher education

The concept of lifelong learning has been a part of educational philosophy for centuries. Since 1970, however, interest in this topic has received wide attention. Providers of opportunities for continued learning are extensive. However, it is higher education that should provide the leadership in offering the diverse populations of this nation access to further educational opportunities.

What role colleges and universities will have in making opportunities for lifelong learning available is currently being debated. Recently there have been a number of reports created by people brought together to study conditions in higher education and make comments on how its short-comings can be corrected (for instance see the reports: *A Nation At Risk: The Imperative for Educational Reform*, *Involvement in Learning: Realizing the Potential of American Higher Education*, *To Reclaim a Legacy*, and *Adult Learners: Key to The Nation's Future*). Few of the reports discuss lifelong learning.

Several organizations have published statements supporting lifelong learning. The American Association of Community and Junior Colleges published their 45 action recommendations in 1979 (Hermann, Enders, & Wine, 1980, pp. 69-80). In 1980 the Phi Delta Kappa Commission on Lifelong Learning published their Principles (Menson, 1982, pp. 119-120). More recently, the American Association for Adult and Continuing Education published its recommendations to identify what it sees as the major issues lifelong learners and organizations offering continuing education will face in the future (Smith, 1983, pp. 10-13). And in its report released in late 1984 the Commission on Higher Education and the Adult Learner said:

> We believe . . that the ability of this nation to compete in the world marketplace and to maintain its strength as the bulwark of democracy will increasingly depend upon an educated and trained populace. We cannot afford to have that education and training stop at age eighteen or twenty-two; the future of America demands that the continuing needs of our *nation* of learners be served. (p. 16)

Since 1947, when colleges and universities were serving less than 2% of the population, access has expanded so that 42% of the population in 1980 was participating in post secondary education (Cohen and Brawer, 1982, p. 30). Not only have more students with diverse backgrounds entered colleges and universities, but more institutions have been created to serve the increasing numbers. Yet for higher education the matter of providing lifelong learning opportunities rather than just a front-loaded education remains an unresolved issue. Colleges and universities must give greater consideration to providing new modes of education to a diverse population.

Changes—What, Why, and Who

Diverse populations at the optimum means all people. Researchers have defined with reasonable accuracy those who will be the potential market for higher education (Peterson, 1980; Cross, 1982; Baldridge, Kemerer, & Green, 1982). Donna Queeney (1984) has stated quite succinctly who the adults are and in what number they are enrolling in colleges and universities.

> In 1972, there were 800,000 resident undergraduate adult students between the ages of 25 and 35 in this country. By 1976 their number had grown to 1.5 million, .5 million of whom were full-time undergraduate students. During this same period of time, 1972 to 1976, college attendance for persons over the age of 35 increased by 50 percent, so that in 1976, there were 1.2 million adult undergraduate students over the age of 35. Thus, in 1976 we had 2.7 million adult students enrolled in colleges and universities.
>
> This seems somewhat remarkable, but what is even more remarkable is that by 1982, these 2.7 million had grown to 4.2 million students, or 35 percent of the 12.5 million students engaged in some form of higher education; one-third of the students in higher education were over the age of 25 in 1982. (p. 2)

But as Howard Bowen (1980) has pointed out, whether other adults who could benefit from higher education enroll will depend on what colleges and universities do to encourage their entry.

Encouragement from higher education means different things to different people. Drew (1978) supports the creation of career oriented programs of study. Houle (1973) speaks of external degree programs. Keeton (1976) and the Council for the Advancement of Experiential Learning believe in the granting of credit for prior noncollegiate learning. Cross (1972, 1978) calls for remedial and counseling programs. Harrington (1977) and Lenz (1980) seek noncredit continuing education courses. Others support the concept of special

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"colleges" for older students (Cross, 1976; Eldred & Marienau, 1979; Greenberg, O'Donnell & Bergquist, 1980), weekend programming (Craiglow, 1984), and the growth of continuing education for professionals (Houle, 1981). This list represents some of the new approaches, or the revitalization of old method, used to serve diverse populations.

However, their use is far from universal. For the older student trying to pursue a collegiate education too often admissions, registration, advising, and degree requirements are structured for the traditional student. No accommodations for the lifelong learner have been made. A lack of recognition of a different life style than that of the eighteen year old, failure to recognize learning completed through experience, and an unwillingness to change courses required in degree programs causes adult learners to seek education from other providers.

Lifelong Learning: It Could Be a Missed Opportunity for Higher Education

If lifelong learning means learning *throughout one's life* then noncredit continuing education programs might be considered a very appropriate linkage. If lifelong learning means learning *at any specific time in one's life* then credit courses to serve a diverse population and direct them through two year, four year or advanced degree programs are also appropriate. Both phrases express the idea of learning throughout life and there is no reason why institutions of higher education should not offer opportunities for each.

It is well documented that many other types of institutions are, and have been, offering diverse educational programs for a long time (Knowles, 1977; Harrington, 1977; Alford, 1980, Houle, 1981; Houle, 1984). Corporations and unions are offering more formal training programs including degree programming. According to Nash and Hawthorne (1985), corporate colleges are a new phenomena. These "colleges" are accredited and have full degree granting authority. Unions provide their constituency with an array of learning experiences. Recently the UAW has joined with Ford Motor Company to expand the educational opportunities for its membership. These alternative sources of lifelong learning will not disappear. They meet the needs of large numbers of adults. However, their presence and activities cannot be considered replacements for the responsibility higher education has to provide learning opportunities to diverse populations.

A number of the providers of educational opportunities do so in order to serve their own needs. Increased profitability, courses of a narrow technical nature, retraining before layoff, and a lack of standards characterize many of the lifelong opportunities offered by organizations outside of higher education.

Colleges and universities serve as centers for research and service. If they are performing these two functions they should be offering access to both through instruction. Teaching should provide people the opportunity to increase knowledge in order to achieve a better standard of living. A better life may be defined differently by every person, but higher education can provide what a large number of people can use to be more productive, contribute to society, and enjoy living. Higher education is in the business of education. So the opportunity for lifelong learning can be offered by higher education without a secondary motive. It can be provided as the opportunity people can use to affect their lives.

There was a time when education appeared to be finite. Finish elementary school, high school, or college and you were educated for life. No longer is this true. In his book *Megatrends* Naisbitt (1982) clarifies the situation with the following statement.

> Scientific and technical information now increases 13 percent a year, which means it doubles every 5.5 years. But the rate will soon jump to perhaps 40 percent per year because of new, more powerful information systems and an increasing population of scientists. That means that data will double every twenty months. (p. 24)

There was a time when employment opportunities for those lacking education beyond elementary school, high school, or college were fairly abundant. However, the situation has changed and according to Choate (1983) "between 10 million and 15 million manufacturing workers and at least as many (unskilled) service workers will no longer be needed in types of jobs that exist today" (p. 4).

Both Gold (1981) and Choate (1983) claim that neither the diminishing number of jobs requiring unskilled labor nor the increasing demand for trained service workers can be met by an undereducated populace, or one that does not have the chance and take the opportunity for lifelong learning. Colleges and universities can provide many of the learning opportunities that will be needed for people to be gainfully employed.

Continued education is also important for people to be able to adjust to a rapidly changing and increasingly complex society. According to McKenzie (1978) and Knox (1981), too often people are unable to adjust to advances in technology, changes in governmental policy, upheaval in their personal lives, and unexpected economic setbacks that cause financial hardships.

A Plan for Action

Higher education has the opportunity to participate in the changing of society by creating methods to provide lifelong learning. It is the chance to deliver services that will upgrade the social, economic, educational, and personal conditions of a diverse population. A number of writers have said that if higher education is to maintain its leadership as a source of new knowledge it must participate actively in delivering services that will provide specific results (Cross, 1972; Hall, 1974; Murray, 1975; Alford, 1980; Carnegie Council, 1981).

However, unless higher education makes a conscious effort to change its method of providing lifelong learning opportunities it will loose its leadership position as primary provider of education to a variety of organizations. The number of people over 25 seeking further education is increasing, but the number of options for them are growing mostly in business and industry.

In providing access, higher education will have to provide a variety of services and programs. While some colleges and universities may choose not to be a source of lifelong learning for diverse populations, and while others may fail to have the resources necessary to offer it, an increasing number should make positive efforts to provide greater access.

> *"For the older student trying to pursue a collegiate education too often admissions, registration, advising, and degree requirements are structured for the traditional student."*

The need for lifelong learning and access for diverse populations to opportunities for personal growth and fulfillment through increased education have been recognized. The actions of commissions, governmental agencies, and associations aside, colleges and universities have the responsibility to provide society with increased learning opportunities because they are at the center of new knowledge, are a major preservor of the traditions of mankind, and are the developer of new technologies.

However, whether higher education is ready to serve diverse populations is questionable. Recently, Hodgkinson said the following about lifelong learning:

> the 72 million people born between 1946 and 1964 were becoming the dominant force in American society and would continue to be so for the next three decades, in all aspects of life. For business and higher education ... it means a 40 percent hike in the size of the 30 to 45-year-old age bracket; it also means, for higher education especially, an increase in adult and continuing education if the enterprise is to grow at all. (American Council on Education, 1985, p. 8)

Growth and survival of higher education is one reason for colleges and universities to take the lead in providing lifelong learning opportunities. More important, they should be provided by higher education because the institution serves as the leader in new knowledge. Through research, community service, and instruction society can be served. Unless the opportunities are available for people to take advantage of the output of higher education it will be lost. The failure of higher education to do so should not be permitted. Society is changing and unless lifelong learning is encouraged the United States as a nation cannot remain a world leader, as a people the citizenry of this country will have increased difficulty coping with the complexitities of the latter 20th century, and as individuals we will be denied the chance to achieve personal fulfillment through educational opportunity. **AAACE**

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PART II

INSTITUTIONAL STRATEGIES FOR MEETING THE NEEDS OF ADULT LEARNERS

Module 4 Providing Support Services for the Adult Learner

Module 5 Facilitating Progression Through Recognition of Prior Learning

Module 6 Designing Curricula for the Adult Learner

Module 7 Instructional Delivery Options for the Adult Learner

Module 4

Providing Support Services for the Adult Learner

–Support Services: A Critical Need
–Entry Services: Exploring the Possibilities
–Moving the Adult Learner Through the System
–Culminating and Exit Services
–References
–Reprints

Providing Support Services for the Adult Learner

Preview

While the most crucial interface between the student and the host institution typically occurs in the classroom, the teacher-learner relationship is only one part of the total educational experience. Success also depends on the range and quality of the services provided to students to help them enter, move through, and exit the institution.

More than merely logistical aids to degree completion, these services must also address the developmental needs of the adult learner. In this module you will be introduced to some of the services that are already being offered or planned to meet the educational needs of adult learners, many of which may be adaptable to your own institution.

Goals

In this module, you are invited to:

- Assess the effectiveness of your institution's support services in relation to established models and adult learner needs
- Identify additional services that may be useful to adult learners in your institution
- Devise strategies for redistributing available resources to meet the support needs of your adult learners

Support Services: A Critical Need

Key Issues.

Unlike the traditional full-time student, for whom the educational experience is the major preoccupation, the adult learner must juggle a variety of roles and demands simultaneously. Without proper support, these demands -- which include occupation, family, and/or community responsibilities -- may become barriers to higher education.

- Institutional Barriers, including policies and procedures related to:
    - Application
    - Admission
    - Enrollment
    - Credit transfer
    - Class scheduling

- Situational Barriers
    - Child care
    - Transportation
    - Finances
    - Work schedule

- Dispositional and Personal Barriers
    - Time
    - Self-confidence
    - Family reactions
    - Special obstacles

To overcome these sizable barriers, adult learners need a strong support system, particularly at the institutional level. This institutional support must not only address the logistical barriers of participation (time, pace, and place) but also the psychological barriers. Both faculty and staff must recognize that becoming acculturated to the diverse norms and resources peculiar to the academic environment requires a substantial amount of learning and adjustment on the part of the adult learner. Services provided to address these needs must be both comprehensive and individualized to account for the diversity of backgrounds, motivations, and abilities that characterize adult students.

Support services for adult learners can be grouped into three categories:

- Entry Services
- Ongoing Services
- Culminating and Exit Services

Article

Specific approaches within each of these groups are discussed in the following article by Steltenpohl and Shipton. The article is reprinted at the end of the module. Evaluate for yourself the effectiveness of the programs implemented as you read the outcomes described in each case. Then answer the questions that follow.

Steltenpohl, E., & Shipton, J. (1986). Facilitating a successful transition to college for adults. *Journal of Higher Education.*

Questions

In general, do the services your institution provides take into account the perspectives and needs of prospective students? Or do these services focus primarily on ensuring that information requirements are met? Are any special provisions made for working adults who apply to your institution?

Key Issues

Schlossberg, Lynch, & Chickering (1989) have proposed an Entry Education Center which would provide the following services:

- *Recruitment* -- with particular attention to the readability level and appearance of recruitment literature and admissions information; the availability of toll-free telephone access and face-to-face contact opportunities (i.e., information booths); and relevant marketing issues.
- *Admissions* -- with particular attention to tracking students within the entry process; evaluation of informal as well as formal educational experiences to assist in determining eligibility; shortening of the admissions process; and assessment of potential situational barriers to participation.
- *Financial Aid* -- with special emphasis on distribution and assisting adults in completion of necessary forms; redefining what constitutes financial "need" so that adults get their fair share; changing requirements originally established for younger students (i.e., parent's signature, degree orientation, etc.); and identifying support opportunities in the community (i.e., employers).
- *Orientation* -- with concern for programs that are accessible and substantive in helping potential students examine their own needs, and that promote contact with faculty and staff.

- *Developmental Assessment* -- provides an opportunity for adult learners to assess their place in the life cycle, career and professional goals, avocational interests, interpersonal and leadership skills, and personal values.
- *Assessment of Prior Learning* -- provides an opportunity for adult learners to gain recognition and/or credit for their work and life experiences, special strengths, and accomplishments.

Question

Adults who are uncertain about their goals will often delay contacting an institution until late in the entry process, usually during registration. What kinds of problems might result from this behavior for both the institution and the applicant?

Application

Consider those services described by Schlossberg, et al. which are currently implemented in your own institution. Which of these services adequately address the needs of adult learners? What improvements could you suggest in each area?

Recruitment:

Admissions:

Financial Aid:

Orientation:

Assessment:

Key Issues

Once the adult learner is matriculated, how is she/he supported throughout the program? How are the competing demands kept in balance, the supports and challenges provided to enable the student to tolerate the stresses of the academic environment and optimize his/her development?

Repeatedly, adult learners express the need to be noticed, to feel respected as an individual (Schlossberg, et al., 1989). If these needs are unmet, the initial commitment and enthusiasm that drew them into the educational system may turn into frustration and eventual submission to the barriers they confront. Practices that encourage, rather than discourage involvement throughout their academic experience include:

- Convenient access to advisors by telephone
- Extended hours for institutional services and personnel
- Increased awareness among faculty and staff regarding ageism and aging
- Provision of structural options (i.e., child care, financial aid, etc.) and psychological options (i.e., increased ability to perceive and/or create alternatives)
- Acknowledgment and encouragement of skill mastery and student accomplishments throughout the curriculum
- Reinforcement of the sense of community often lacking among adult learners

Application

Identify the kinds of resources that are currently available in your institution to provide ongoing support for adult learners. Consider personnel, space, materials, etc. How could these resources be distributed to address the needs described below?

Sense of community with peers, faculty, institution -- i.e., space for adult learners to meet and study, formal campus organizations, informational publications, co-curricular/recreational activities, etc.

Counseling services -- including developmental mentoring, personal counseling, career counseling

Academic support services -- including academic advisement, learning/assessment centers, remedial/advanced placement programs, peer assistance, distance learning options, extended library access, etc.

Life services -- including alternative housing, family care, health services, food services, transportation, etc.

Culminating and Exit Services

Key Issues

Traditionally, exit services have been the least developed of all student services. Career placement services are frequently limited to on-site interviews with company representatives seeking bright, young graduates. Instruction in resume writing, interviewing, and job hunting may be provided, but administered in a fragmented, decentralized manner. For adult learners, who may fear that age may be a barrier to employment, these services are as crucial to a successful culmination of the education experience as entry services are to its beginning.

The exiting process should minimally consist of four major components (Schlossberg, Lynch, & Chickering, 1989):

- *An exit course which helps learners integrate their learning and plan for the future*
- *Reviews with advisors and counselors*
- *Referrals for career planning and placement services*
- *Referrals for the transition process*

Questions

How is the exit process currently handled for students in your institution? Are these measures adequate for the adult learner?

Application

Consider how each of the following components of the exit process could be realized in your own institutional setting. What resources are currently available to implement each exit strategy?

An exit course which helps learners integrate their learning and plan for the future:

Reviews with advisors and counselors:

Referrals for career planning and placement services:

Referrals for the transition process:

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Elizabeth Steltenpohl
Jane Shipton

Facilitating a Successful Transition to College for Adults

The fastest growing segment of the college population in the United States is made up of adult students. Adults are entering colleges for the first time or reentering, after a long absence from the classroom, in ever-increasing numbers. Between 1970 and 1982 the number of adult college students (aged twenty-five or older) doubled from 2,400,000 to 4,800,000 [22]. Although colleges welcome the enrollment of adults to bolster declining numbers of traditional-age college students, most institutions have not yet considered the special needs of adults or their special potential for scholarly work. In a recent book, *Andragogy in Action*, which describes ways business, industry, government, higher education, and other agencies are providing for the needs of adult students, Malcolm Knowles states, "It is perhaps a sad commentary that, of all our social institutions, colleges and universities have been among the slowest to respond to adult learners" [11, p. 284].

As faculty members for thirteen years in one of the first major colleges designed for adults, we argue that not only our students, but adult students, generally, experience feelings of inadequacy and marginality upon entry or reentry to college, feelings that are counterproductive to academic success. We argue further that to overcome these feelings adults need an introductory learning experience that provides an opportunity for a realistic self-appraisal of their potential as adult learners, the achievement of a sense of belongingness, and a deeper

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understanding of higher education in general and the meaning of liberal education in particular. While some colleges offer courses in career and personal development or in study skills for entering adults, it is our conviction that these are fragmentary and do not adequately meet the needs of the returning adult. Six years ago the authors devised and began offering an introductory learning experience — taking a comprehensive approach — for adults returning to college.

In this article we will describe the needs of entry adults and their characteristics as learners as we have come to understand them through our experience and study. We will also discuss the significant elements and outcomes of the course we offer, including how we perceive our course reflecting current thinking about adult development and adult learning.

Needs of Entry Adults

College entry signals transition in adult lives. By transition we mean "a process of continuing and changing reactions over time — for better or worse — which are linked to the individual's continuous and changing appraisal of self-in-situation." [20, p. 56]. Adults must make the transition from citizen in-the-world to student when they enter college. At the same time, they may be negotiating transitions related to self, job, or family. These transitions may be conscious or unconscious. All are accompanied by uncertainties and risks as well as opportunities.

In addition, new adult students lack confidence in their ability to study and learn. They are uncertain about expectations for college-level work. They do not understand the aims and purposes of liberal education. They lack information about the structure of colleges and universities and the organization of knowledge into disciplines. Their academic skills may be rusty or inadequate. They are strangers in this new world. They do not feel they belong. They feel marginal.

A profile based on data on the first 115 participants in our voluntary, introductory course helps make more concrete the typical needs of entry adults. Our students are adults between the ages of twenty-six and fifty-eight, largely female (73 percent) in nonprofessional, nonmanagerial occupations. Eighty-one percent enter the college with specific occupational/professional interests. Their intended areas of study are business (47 percent), community and human services (20 percent), and teaching (14 percent). Interests of the others are scattered among science, technology, humanities, and social sciences. Forty percent have no previous college, and 18 percent have fewer than sixteen credits. Almost 60 percent lack prior exposure to the values and norms of higher education. They favor a concrete mode of learning (71 percent) over an abstract mode (29 percent).

Goals of Entry Course

In designing our course, we have integrated diagnosis and skill building with rigorous content related to the person (self), adult learning, and the world of higher education. We feature self-assessment, not external diagnosis, and skill building through practical use of skills, not isolated exercises or repetitious drill. We also use an experiential approach to move students from concrete modes of learning toward more abstract ways of knowing. Our major goal is to empower uncertain and anxious adults who feel like strangers in the academic world so that they can become successful participants in a college environment.

The course is designed to capitalize on the interplay between content and process. Learning takes place in a group setting with 12 to 15 participants. Faculty assume the role of facilitator rather than that of traditional instructor. Students begin with the familiar and personal and move toward the more general and abstract. The study of adult development immediately engages the student in a process of assessment of and reflection on the self and possible reasons for the decision to return to the classroom. A consideration of oneself as an adult learner and an assessment of one's potential in that role follows logically. At this point the student is prepared to inquire into the purposes of higher education, including the meaning of liberal education.

To date, about 350 students have voluntarily enrolled in this eight-week (2 hour per week) transition course. A majority have done so on their initiative after receiving printed information about the course prior to enrollment, or after hearing the course described at the time of their enrollment in the college. Some students are referred by their academic advisors. In the following two sections of this article, we will share with the reader the features of the course we have found have a strong impact on the retention and development of adult students, including selected responses of students that illustrate the outcomes that can be achieved.

Critical Elements of the Learning Process

The dynamics of a peer group, concrete experience, and self-assessment on a number of dimensions are the critical components of the learning process.

Group Dynamics

Our extensive experience with individualized instruction of adults convinced us that one-to-one advising was insufficient as an entry activity and that uncertain and anxious reentry students would benefit from support of and interaction with peers. We also learned adults enroll or reenroll in college largely to correct a felt deficiency. Adults feel inadequate in our society if they do not have a college degree. They encounter obstacles to job advancement or mobility because they do not have "credentials." Hence, upon entry to college they focus with intensity on the final outcome of education — the degree. This preoccupation with the degree seems to eliminate consideration of the process of reaching the goal, namely, learning, or the student's role in that process. This felt deficiency is also accompanied by a strong sense of urgency. "Here I am," they say, "already forty-two and I don't have much time left. Everyone else has degrees. I want mine as quickly as possible." They feel unique, the only adult in the world who feels so inadequate and under so much pressure to overcome inadequacies quickly. This observation led us to the conviction that these adults need an opportunity to share their anxiety and sense of urgency with others experiencing the same syndrome; hence, the group approach. It is not a conventional 4-credit class anyone may include in his or her schedule at any time in the college career, but a class exclusively of adults as the first course upon entry or reentry to college.

Concrete Experience

Our experience also suggested that our students were largely concrete learners. Indeed, based on the Kolb Learning Style Inventory, [15], 71 percent favored concrete over abstract conceptual modes of learning. Kolb's inventory, based on experiential learning theory, measures the relative emphasis an individual places on four learning modes: concrete experience, reflective observation, abstract conceptualization, and active experimentation. Learning style is established by combination scores of abstract conceptualization and concrete experience indicating the degree of emphasis on abstractness over concreteness, and active experimentation and reflective observation indicating the degree of emphasis on action over reflection. On the whole, our students emphasize concreteness and reflection. Assignments and activities for the group are devised to draw on the students' strength as concrete learners. Activities include holding interviews and listening to the experiences of former students as well as readings and written exercises. Our goal is to make the group a laboratory for learning how to learn. The outcomes of the activities are shared in a non-threatening atmosphere. Sometimes this takes place in small leaderless groups, sometimes in the larger group.

This approach has benefits for new, uncertain, and uneasy adult students. It enables students to compare their efforts with the reality of their peers' efforts instead of measuring themselves against some imaginary criteria for college work. The student learns his or her efforts are better than, the same as, or worse than those of others, what the differences are, and, last but not least, the expectations of the college for acceptable work. This learning process builds confidence.

Self-Assessment

Our experience in working individually with adults returning to college led us to concur heartily with Malcolm Knowles's statement, "If one thing stands out about adult learning, it is that a self-diagnosed need for learning produces a much greater motivation to learn than an externally diagnosed need" [14, p. 284]. We were certain that telling adults what their strengths and limitations were or what they needed to learn was not useful. Accordingly, self-assessment activities are built into each session of the group study.

At the first session, students complete a 47-item self-assessment checklist developed by us, on which they identify levels of competence and knowledge on topics related to persistence and success in college; for example, studying independently, ability to state specific educational goals, reading comprehension, writing, using the library for research, nature of the learning process for adults, and the content and functions of the liberal arts disciplines. We also use a variety of exercises and standardized, self-administering, self-interpreting instruments to help students in their self-diagnosis. These will be discussed in more detail later in relation to particular components of the curriculum. The commonality of all the self-assessment activities is student control of materials and responsibility for interpretation.

Critical Elements of the Curriculum

The content of the curriculum for the group study grew out of the needs of college-entry adults discussed above. The background of the authors — from counseling and from educational studies — also contributed to the emphases we chose and the interdisciplinary nature of the course. In the following section we will address four critical components of the curriculum in the sequence the students address them.

Developing as a Person and Learner

Study of the life course, its crises, transitions, and the dynamics of change provides perspective on adult students' discomfort and uncertainty as they begin college studies. This activity significantly alters students' "appraisal of self-in-situation" [20, p. 56] and places individualistic fears in a broader conceptual context. Students find a vocabulary to describe their anxiety as they face the risks involved in the transition from citizen-in-the-world to student. They learn that they are not unique or isolated cases. As they engage in reflection upon their own life course, they realize they still are capable of growth and change, which is our goal.

In addition to feeling anxious, uncertain, and marginal upon entry, 81 percent of our students enter or return to college for primarily vocational reasons with a deep sense of urgency to complete their degrees as quickly as possible. Hence, many have an instrumental approach to their education. Adult students view college attendance as largely connected with increasing or changing occupational skills. They frequently do not consider the possibilities education can provide for growth, acquiring non-occupational skills, or personal enrichment.

Learning activities and resources. To widen their perspective on self, students explore the phase theory of development in adulthood which is based on age differences. Their reading includes "Adult Personality: Toward a Psychology of the Life Cycle" by Neugarten [17], "Periods in the Adult Development of Men: Ages 18 to 45" by Levinson et al. [16], and "Transformation in Mid-Life" by Gould [10], which provides a kind of road map of adults' life events and concerns. They locate their position on the life course, determining if they are "on time" or "off time" and why. Finding one is "on time" provides its own rewards. Recognizing that college enrollment at mid-life is an "off-time" event for adults helps explain some of the urgency they feel with respect to the completion of their studies. Students continue their exploration by examining the personal dynamics of transitions, crises, and change as posed by Erikson [8] and Gould [10]. They consider their roles and their development of these roles. Acquaintance with adult development literature reminds students that they are much more than workers; they are also parents, spouses, children, friends, and citizens. Their accomplishments are not confined to the sphere of work.

Students extend their consideration of adult development by reading Weathersby's work on the relationships between life stage and learning interests [23]. They maintain a daily journal of interests, questions, or problems that need solving as posed by newspapers, television, film, the work place, the community, and the world. They experience the self as normal, multifaceted, and capable of growth.

With a study of the life course literature and Weathersby's work relating development to educational needs and interests as background, a study of the literature on intellectual development increases the students' understanding of their potential for growth as learners and aids in setting goals for educational development. Whitehead's writing in which he describes stages of romance, precision, and generalization in learning serves as a good introduction to forms that intellectual development may take [25]. Students attempt to identify their stage of development in various areas of their lives, for example, in relation to their occupation, or their hobbies, or their community activities, using Whitehead's categories. This reinforces the concept of development and leads adults to think of the necessity for developing as learners just as they anticipate development as persons.

Outcomes. As one of the 80 percent of course participants who entered college for occupational reasons, Sally Y., age 40, anticipated majoring in business. Before marriage and raising a family she had been a secretary/administrative assistant. Her goal was a managerial position. At the conclusion of her study of the life course and considering Whitehead's stages of education she had this to say:

> It is time to redefine my life achievements and reflect on what my needs and desires will be in the future. I am beginning to concern myself with others, with future generations and the nature of society and the world in which those generations will live. I'm approaching Erickson's stage of generativity versus self-absorption. . . . I learned from Gould I am in transition — a time to enlarge and expand my self-definition. I believe that investing in my own growth is the best investment in the future. . . .
>
> My goals are not totally clear at this time. The business world seems most open and available because of past experience but my heart seems to reach out toward social and psychological concerns. I'm in Whitehead's stage of Rómance in these areas. Do I want to move toward the Precision stage in the social sciences? The idea appeals to me greatly. . . ."

For Sally, the study of adult development and considering the relationship between her place on the life course and learning interests has made conscious the beginning of a change in self-concept. She sees herself in transition. She is reaching out for a new identity and recognizing new interests. She was surprised to find upon examining her journal that her concerns were not occupational but social — the environment in her locality, the arms race, and questions about war and peace. Sally was not unique among course participants. Many of them begin to raise questions about their unexamined assumption that one returns to college simply to acquire new occupational skills and find a better job. More than a few students began to wonder if an occupationally oriented degree would, in fact, fulfill their developmental needs or satisfy their curiosity as learners.

Becoming an Adult Learner

Acquiring the knowledge and appreciation of what it means to be an *adult learner* constitutes the second of the critical components of our transition course. Our goal is to empower students to take responsibility for their own learning as they have taken responsibility for other areas of their lives as adults.

The fact that adults choose to enroll or reenroll in college is not of itself a guarantee that they actually perceive themselves as learners and certainly is no assurance that they appreciate the particular characteristics of being an adult learner. For persons who have been away from school for a number of years, there is a natural tendency to think of education in terms of their childhood or adolescent experience in which they undoubtedly had a highly dependent role as learners.

On the self-assessment checklist mentioned earlier, completed by students at the first session of the group, one-third of the students rate themselves low on their knowledge of the "nature of the learning process for adults" and of the "characteristics of self-directed learning". As a further self-assessment activity, to initiate the session on adult learning, students are asked to assess themselves on the competencies of self-directed learning as identified by Malcolm Knowles [12]. In doing this, most students rate themselves high on being non-dependent and self-directing persons, but they rate themselves low on their understanding of adult learning and their ability to diagnose their learning needs, to translate these needs into objectives, to identify strategies and resources for achieving objectives, and to evaluate outcomes.

Learning activities and resources. To open this subject for students, readings are undertaken in sources such as *The Adult Learner, A Neglected Species* [13] and *Self-Directed Learning* [12] by Knowles and in

No Limits to Learning [2] by Botkin et al. To test ideas from the readings in a concrete fashion, students are asked to interview another adult student of their acquaintance and to reflect on their own experience relating to the characteristics of adult learning, including the role of experience in learning as well as on the process of learning most congenial to adults. Students consider the differences in self-directed and teacher-directed learning. Maintenance and innovative learning as formulated by Botkin [2] are explored for their implications for adult learners. As mentioned earlier, we, as faculty, generally strive to function as facilitators of the learning process in our class study, but in particular, we attempt to do so in our work with our students on the subject of adult learning.

Outcomes. Having initially enrolled in a non-traditional college by coming to Empire State, our students might be thought to have a particular appreciation of alternative views of learning, but they enter knowing little about themselves as learners or about adult learning. How they can come to change their view of themselves and begin to take more responsibility for their own learning is illustrated by the case of Wilma S. A single parent with two school-age children, Wilma had completed an associate degree in liberal studies before coming to Empire State. She was working currently as an assistant teacher in a nursery school. In the beginning weeks of the course, Wilma made few contributions to group discussions and gave the impression that the demands of her work and family life were making it difficult for her to keep up with her course reading and other learning activities. As the weeks passed, however, a notable change occurred. Wilma began to emerge as an active course participant and assignments were completed not only in a timely but excellent fashion. What had happened?

Wilma provides some insights in excerpts from her final paper for the group study, which she titled: "Adult Learning."

> I am experiencing the romance of being an adult learner; it is still new and exciting. However, I have gone from just freely exploring the idea of becoming an adult learner to learning ways to accomplish it. . . . Learning requires discipline, plenty of it. Although I lacked this discipline at the beginning of my studies, I have rapidly been gaining it with the help of exercises in this course, help with time management and, most of all, from the support of my peers and mentors.
>
> Assessing myself through this course has been a start in the process of becoming an adult learner. . . . To be an adult learner means to be self-directed, independent, and able to choose from growth needs.
>
> I don't know if I am on the way to becoming a new and different person,

> but I do know that my habits of studying and my idea of what it is to be a student are different. . . . My ability to analyze, synthesize and evaluate will improve, but most importantly, I know I am in charge of the direction my education will follow.

The experience of Wilma and other students in confronting the meaning of what it is to be an adult learner can lead to a transition in their view of themselves as students. They begin to take the kind of responsibility for their own learning that matches the responsibility they have assumed for other areas of their lives. This is a critical step in becoming a successful college student.

Assessing Academic Skills

All adults returning to college experience some uncertainty about the adequacy of their academic skills. Some have excellent skills but lack confidence in their ability, others have deficiencies and can pinpoint their limitations. Still others seem to lack totally an understanding of their skills or the expectations for satisfactory college-level work. Telling students their skills are superior does not automatically produce self-confidence. Nor does telling students their skills are inadequate and prescribing remediation always prove convincing. Weaving self-assessment of academic skills into the fabric of our course proves to be a most useful device to build the confidence of the well-prepared student and to help the student with deficiencies set goals for remediation in a convincing fashion.

Some of the academic skill problems of our entry students are reflected in the checklist completed at the first meeting of the group. A substantial percentage rate themselves low on the following skills: critical reading, selection of a research topic, organization of data, use of the library, and analytical ability. As mentioned previously, 70 percent of the group are largely concrete learners who do not favor abstract conceptualization as a learning mode.

Learning activities and resources. At the first class session the writing sample taken at the time of enrollment in the College is returned to students without their scores, along with samples of each of four levels of student writing and a list of criteria for judging each level prepared by the English faculty. The students are asked to score their writing on the basis of the samples and criteria and are then given their scores as determined by the English faculty. This is a first step in becoming aware of their actual performance. It is followed by the self-administering, self-interpreting usage and logical relationships sections of the Descriptive Tests of Language Skills [7], which add another dimension to understand writing and thinking skills. Students also explore the ways they learn best through use of a self-assessment checklist, which provides a learning portrait. Preferred learning modes are tabulated in the class and note is made of their preference for learning by doing. This is matched with the outcomes of the Kolb Learning Style Inventory which confirms their preference for concrete experience or reflective observation as learning modes. This, in turn, highlights the need for developing abstract conceptual modes. Students also complete an exercise in analysis and rate the outcome on a four-point scale. Because most do not rate in the upper levels, their awareness of incorporating the develoment of analytical skills in their educational goals is heightened.

An important aspect of the academic skill self-assessment activities is their diversity. The task is approached from different perspectives. The students receive information from multiple sources. Whereas it is easy to dismiss one indication of skill limitation or strength, if there are several, the evidence cannot be ignored.

Three major written assignments provide another forum for self-assessment of academic skills. The first, an essay summarizing the outcomes of all their assessment activities; the second, a learning autobiography describing learning situations and outcomes in their lives; the third, a referenced paper drawing on course content to describe the outcomes of the course in terms of impact on educational goal setting. Approaches to the writing assignments are discussed, and samples of the assignments written by earlier class participants are made available for reading. Written and oral feedback is provided by the faculty. In the case of the final paper, drafts are read and critiqued in the group. Students who are not writing at or near college level are assigned to work with the writing faculty while they continue the course. They often do not complete their final paper until sometime after the conclusion of the course.

Outcomes. Adults who actively participate in assessing their academic skills through concrete experience are eager to set goals for remediation or for the development of new skills. Indeed, being able to name their limitation or the skill to be acquired seems to generate strong motivation and even enthusiasm for getting on with the task. Following are examples of students' responses to what they have learned about their academic skills through self-assessment.

> I have been intrigued by many things in the course of my life but have been too undisciplined both in school and out to get a decent foundation in

> much of anything. This was objectively verified for me on taking the Language Usage tests. I found I do not know the basic rules of grammar. It was at this point I began to see some of my limitations and to feel uncomfortable contemplating them.
>
> I still have not quite recovered from reading Bloom's scheme of intellectual development and discovering that I am a concrete learner through the Learning Style Inventory. . . . Ever since that reading, I have determined to expand my style of thinking and to strengthen my conceptual skills.

Becoming an Educated Person

Exploring the meaning of higher education, including its development historically as well as its scope and purposes today, the consideration of outcomes in terms of competencies as well as subject matter and the relationship of career and liberal education has proved to be another significant component in achieving the goals of our transition course. Indeed, it is a critical element in achieving the goal of understanding what it means to be an educated person.

As mentioned earlier, 40 percent of the students enrolled in the group study have had no prior college study and of those with transcript credit, 18 percent had only 1-16 credits. On the self-assessment checklist completed at the first session of the class, one third of the students rate themselves "low" or as "needing assistance" on the kind of knowledge required to plan a meaningful program of study in the college. Specific items on the checklist include: ability to set and state educational goals, knowledge of the content and functions of the liberal arts disciplines, and knowledge of differences between introductory and advanced levels of learning. Also at the first session students are asked to write a brief statement giving their definition of an "educated person." These statements often refer to the "well-rounded" person or consist of a wide-ranging list of characteristics that are not elaborated. Specific expressive outcomes of education are articulated by very few students.

As a further self-assessment activity at the start of our consideration of higher education during the course, the students are asked to list specific areas of study in which they are interested, those in which they are not interested, and those which they know nothing about. The typical reply under areas of interest includes topics of occupational study, such as business, human service or computer skills, whereas math, science, and the humanities are listed as areas of little or no interest or no prior knowledge. The view of education held by two-thirds of the students taking the course (based on every measure used with the students) is a highly instrumental one in our judgment. Particularly for persons with little or no prior exposure to higher education the instrumental values of our society today seem to translate readily into the desire or need for a college credential focused solely on occupational interests. This is clearly a limited background with which to undertake goal-setting and program planning in a college setting.

Learning activities and resources. What a college education should consist of is, in fact, an issue in higher education today. Quite regularly over the past several years reports have appeared from college campuses, scholarly groups, foundations, and government bodies with recommendations and rationales for undergraduate education. Examples of these are: *Higher learning in the Nation's Service* published by the Carnegie Foundation for the Advancement of Teaching [3], *Toward the Restoration of the Liberal Arts Curriculum* of the Rockefeller Foundation[19], *Integrity in the College Curriculum: A Report to the Academic Community* issued by the Association of American Colleges [1], and *Involvement in Learning: Realizing the Potential of American Higher Education* of the U.S. Department of Education [21]. Debate over the role of specialization versus general education, of career versus liberal education, and of intellectual versus affective competencies have constituted aspects of this discussion and provide rich material for student reflection. Placing this discussion within the broader context of current social values, the historical development of the university and its organization today is accomplished in our course, first of all, through selected readings from scholarly and popular publications. In addition to excerpts from the reports cited above, the readings include selections from: *Liberal Education in Transition* by Conrad and Wyer [6], *A Quest for Common Learning* by Boyer and Levine [4], *The New Liberal Arts* by White [24] and articles such as "Integrating Liberal Education and Work"[5], and "A Businessman Looks at the Values of Liberal Arts"[18]. As more concrete activities, the students engage in analyzing college catalogs, perusing daily newspapers, sketching timelines and listening to faculty speakers in various fields. Terms, such as liberal arts, general education, rational thinking, science, classical education, humanities, advanced-level study, disciplines and interdisciplinary study, and the issues surrounding them begin to take on substantial meaning for students. Social as well as individual purposes for education are recognized. A desire for connection with one's cultural heritage often emerges. Students are surprised by the number of disciplines and inter-disciplinary areas in the liberal arts. A knowledge base is being formed about the nature of education that can lead students to more thoughtfully address the questions of purpose and content in planning their college education.

Outcomes. As the final week of our group study approaches, students are given back the description of an educated person they wrote at the first session. Their final assignment is to write an outcomes paper on their experience of the eight weeks including any clarification that occurred relating to their understanding of higher education. The way in which students' notions about how the meaning of being educated, including the role of the liberal arts, can be expanded is illustrated by the differences in the initial and final statements of Ruth R. A married woman in her mid-thirties with two young children, Ruth chose to resume her education after an interruption of fifteen years. She had completed two years of college in a secretarial science program immediately following high school and had worked periodically since as a secretary. The opening sentences of her original statement describing an educated person read as follows:

> My idea of an educated person is one who is well-rounded in all the areas of his or her life. I feel an educated person knows what is going on in the world of politics as well as in the world of sports. . . .

Eight weeks later, in concluding her final paper for the course Ruth R. wrote:

> In the past eight weeks I have acquired a great deal of knowledge with respect to myself as a student and as an individual. I have come to realize in order to be a more educated person I must broaden myself. . . . I feel I have overspecialized in business subjects and plan to widen my horizons. . . . I shall try to improve my analytical skills, to become more familiar with the past and with the arts and learn to listen to and evaluate the opinions of others more carefully. . . . An educated person should be self-directing, enthusiastic, open-minded and have an unending willingness to learn. . . . The direction has been set and now I must fulfill my goal to become a truly educated person.

The expansion of Ruth's thinking about her educational goals includes not only the identification of specific topics in general education but particular, intellectual competencies representing a significant transition in her understanding of higher education. Such movement or enhancement of thinking about the purposes of college is our goal in exploring with entering students the meaning of higher education.

Outcomes of the Entry Course

Of the several hundred students who have enrolled in our course over the six years we have offered it, 85 percent attended all eight sessions of the course. Follow-up meetings have been held with students who persisted in the college six months to two years after their completion of the course to learn their reactions to their subsequent experience in the college. One group meeting was videotaped to share the students' reaction with colleagues on our faculty and with other educators. Individual faculty members in our institution who have taught these students have also been queried about their performance. A follow-up inquiry was conducted as well with students who did not finish the course.[1]

Students Who Persisted

Among the students who completed the eight-week course and stayed enrolled in the college, what was the nature of their subsequent academic experience? Given the purposes of the course, namely, to lead students to identify their individual educational needs and interests, to see themselves as adult learners and to appreciate various views on what it means to be an educated person, the success of the course must be measured ultimately in terms of students' ability to translate these goals into subsequent steps in their education. Individual appointments are held with students completing the course to facilitate their next steps in the college. Various routes have been followed by "graduates" of the introductory course indicating students' efforts to pursue individual educational goals. Among the short-term steps taken by some students immediately following completion of the course have been the improvement of their academic skills through study of a topic such as expository writing, an introductory study in a discipline to determine its suitability as an area of concentration for a degree program, and introductory studies in one or more liberal arts disciplines to better appreciate the liberal arts. For students ready to think in the longer term, a credit-bearing study entitled "academic planning" is available in which a complete degree program is designed. Students with few or no prior college credits typically select a short-term step immediately following the course whereas those with substantial previous college credits undertake the planning of their full degree programs. The nature of students' experiences in each instance, including the ways in which the entry course influences their subsequent college study, is best illustrated by actual cases, such as the cases of Catherine P. and Charlotte C.

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[1] A technical analysis is underway that systematically traces the enrollment and academic history of a sample of students who enrolled in the course and compares it with the history of a group of students who entered the college at the same time but did not enroll in the transition course. A full report on the outcomes of this study will be written at its completion.

> *Case of Catherine P.* Catherine, age 32, wife, mother of two young children, full-time employee of a large urban hospital, entered the college with no prior college credits and limited academic skills. On one hand, Catherine entered the group anxiously asking: "Do I have the ability to succeed in college?" "Am I striving for a success I cannot reach or a goal I cannot accomplish?" "Can I take the pressures that are going to arise as I take on this new endeavor?" On the other hand, Catherine's goal to earn a bachelor's degree and become a C.P.A., was most ambitious.
>
> The course's self-assessment activities proved very productive for Catherine. While she identified limitations in oral and written expression and the need to sharpen study skills, she also made positive discoveries about herself and the learning she had acquired through experience. This heightened awareness of limitations and potential led to greater flexibility in considering her educational goals. Catherine's first priority was to sharpen her verbal and study skills. Then, instead of planning for her long-range goal, the baccalaureate degree in accounting, she chose to plan an associate degree with a concentration in foundation studies in business. This provided an opportunity to test if she would be successful in studying accounting and whether she enjoyed the study of this subject before making a commitment to an accounting major. At the same time she was becoming acquainted with the field of business studies in general and could choose another branch if necessary. Catherine completed her associate degree. She was able to plan a four-year degree with confidence because she repaired her verbal and study deficiencies and learned through experience that she could master the accounting courses.

Catherine's case is not unique among course participants with little or no prior college experience and limited academic skills. Self-assessment activities that result in an expanded sense of self and identify skill limitations and strengths convince the students that acquiring good academic tools is both necessary and possible. This knowledge enables the student to overcome the problems that might limit their success as students. In addition, setting a short-term goal, the associate degree or its equivalents, has advantages: (1) the associate degree does not require advanced study, hence, students feel free to repair skill deficiencies and experiment with introductory studies in a number of disciplines; (2) the associate degree provides an opportunity to test one's interest and capability in the intended major without a sense of loss or failure should a change become necessary; (3) aiming for a short-term goal keeps students motivated to maintain their commitment to education; (4) the attainment of a two-year degree provides a strong sense of achievement and the motivation to consider a four-year degree based upon past success.

Case of Charlotte C. Charlotte had first enrolled in college immediately after high school and had attended for two years, accumulating about 70 credits in general education. She married at that point and concentrated over the next twenty years on raising a family while also participating in community activities related to family counseling and hobbies in the arts. She came back to college with a rather traditional view of what it meant to be a college student, with uncertainty about her ability to learn as an adult, and with the intention to use her further education solely as a vehicle for launching a career in the human services.

The outcome of Charlotte's readings and other activities in the course was a major expansion of her thinking about her college education and herself and the incorporation of that thinking into a college program. At the conclusion of the course she wrote, "I came to Empire State intent on obtaining the credentials necessary for a career. I had forgotten about the joy of learning in itself. I also have discovered there are more doors than the one to a career that I want to open, doors to personal growth and social awareness as well. . . . I have realized that I am not yet complete. I am in a transition. I find myself wanting to take risks, break rules, embark on new adventures, and to become important in my own eyes." Building on her life experience and interests she designed a program with a thematic concentration on the family in America that integrated liberal and preprofessional studies and included the study of adult development. Rather than emphasizing traditional preprofessional topics in social work she chose interdisciplinary studies on the history, literature, psychology, and sociology of the family along with the study of statistics and research methods. It was a rich and rigorous program. Coupled with her prior general education, Charlotte's interdisciplinary studies on the family led to a high level of scholarship in the completion of her bachelor's degree and admission to a first-rate graduate school of social work. In achieving these outcomes, she had clearly come to recognize herself as an able, adult learner and to view her education in an integrated fashion, having expressive as well as instrumental values, which enriched her as a person while providing her with the basis for a human service career.

For other students like Charlotte C. who were reentering college after a lengthy interruption but had substantial prior transcript credit and/or life learning and adequate academic skills, very useful outcomes also occurred. These outcomes related particularly to the *quality, ownership* and, in some cases, the *uniqueness* of the educational programs these students planned as well as to the confidence they gained in themselves as adult learners. Rather than simply fulfilling degree requirements, many of these students attained a remarkably high level of scholarship after entering the college with great uncertainty about their ability to succeed.

The Non-Persisters

The 15 percent of our students who did not complete the course differed in several respects from those who did finish. They had less prior education, only 19 percent had any prior college, out of a total group of whom 40 percent had some college credits. Proportionately more of them were younger, male, and unmarried in a group who were three-quarters female and married. On the self-assessment checklist completed at the first meeting of the class, over half of the drop-outs rated themselves "low" or "needing assistance" on knowing the content of the liberal arts, on understanding the characteristics of self-directed learning, on knowing the nature of the learning process for adults and on deciding on an educational plan for themselves. At the same time they did not rate themselves any lower than the group as a whole on academic skills.

Why did these students withdraw then, since the course was clearly focused on meeting the types of needs many identified for themselves? A follow-up inquiry of a sample of the dropouts was made through telephone interviews conducted by a college ombudsman. Most cited personal reasons relating to their work life, their family life, or their health, and often some combination of these factors, as the reason(s) for their withdrawal. A few said the amount and kind of study required was not what they had expected. In our opinion, as the instructors of these students, personal reasons did account for approximately half of the withdrawals. The other half, however, were due to poor academic skills *not* recognized or admitted by the students themselves and, related to that, unrealistic expectations about the demands of college upon their time, sometimes combined with personal reasons. Certain events in the personal lives of adult students will always be a liability in their college enrollment and cause at least some temporary withdrawals. Unfortunately, what begins as temporary withdrawals too often becomes permanent. Attrition is defined in our institution as withdrawal for more than a year and a day. A 1982 study, *Retention & Attrition at Empire State College*, published by the college's Office of Research and Evaluation makes the point, "When a college . . . enrolls adults from age 16 to 80, there occur numerous personal and family events such as death in the family, illness, job transfer or unemployment, that generate a certain level of *uncontrollable, irreducible, personal* attrition." [9, p. 5]

The need is clear for adults with little or no prior college study to obtain as realistic an appreciation of the demands of college as possible at entry and to strengthen their academic skills, if necessary, to meet these demands. We now view entrants matching this profile as extremely high risk students. We are attempting to intervene with individual advising and other support services when such students enroll in our course and to follow up with them if they withdraw during the course. We believe they need to become aware of the risk they face related to succeeding in college and to plan their college experiences in light of this knowledge.

Conclusions

Our experience as faculty members working with adults entering or reentering college convinced us they have special needs that should be addressed so that they can successfully make the transition from citizen-in-the-world to college student. Most colleges that enroll adults have yet to acknowledge and address their special needs.

We initiated a comprehensive entry course at Empire State College that provides adults with the opportunity to know themselves as persons and learners and to explore the meaning of higher education. Our goal has been to enable adults to overcome feelings of inadequacy or marginality and to achieve a level of understanding and a sense of belongingness that will constitute a successful transition to college. Through our experience in offering our entry course and through study of its participants we have identified features of the learning process and components of the curriculum that we found to be critical to the further success of our students in the college and which we have described in detail in this article. Overall, we are convinced that the effectiveness of the learning process in our course is related to the extent of our implementation of the Kolb model of learning. The curriculum of the entry course is built around the concept of life transitions. We believe the course helps adults initiate several kinds of transitions including life-phase transitions in career or personal development, as well as transitions specifically related to their educational endeavors.

Coping with the obstacles to college entry in the ways provided by our course has produced a sense of belonging or bonding for a large number of adults entering Empire State College. It has empowered some adult students to achieve a formerly unrealized potential for scholarship. For others, subsequent college study has led to the completion of occupational credentials as well as to a broadened perspective on self and the world through the study of liberal arts. Even for those who have left, we believe there have been important learning outcomes through heightened self-awareness and, in some cases, through the continuation of their education in another, more suitable setting.

Based on our experience, we are convinced that other eduators of adults would find that the provision of a comprehensive entry course for their adult students would aid these students in making a more comfortable and successful transition to college. Institutional commitment to adult students demands more than simply enrolling them in existing programs designed for traditional-age students and then excusing the adults from certain requirements, such as physical education courses. It means taking positive steps, and a logical beginning point is with the entry experience of adults. The initiative may be taken by administrators, or faculty, or both. One approach is through a faculty development project in which one or more faculty members who have taught adult students reflect on their own disciplines, on their experience in teaching adults, and on the rich literature on adult learning and development to identify concepts and skills they believe have relevance for the success of students in their institution. This is the route we followed. A team approach in which the members represent disciplines that can complement one another in their contributions to the entry course can be very fruitful. For example, we found our respective backgrounds in the fields of education and human services proved highly complementary in developing the curriculum components and learning process of our course. The possibilities for adaptation of our model are many. However, we are convinced that for maximum effectiveness the course should consist entirely of entry or reentry adults and be the first study in college. Beyond that, one might take an interdisciplinary approach to the curriculum in the form of an introduction to the humanities or some other interdisciplinary topic, or one might use an introduction to a specific discipline as the basis for an entry course. Concrete learning experiences and self-assessment of academic skills can be incorporated into any area of study. Examining how one learns and the differences between learning as a child and as an adult need not be presented to students in terms of adult learning theory. Becoming acquainted with the purposes of liberal education and the organization of knowledge into disciplines could be achieved through consideration of the history and development of a specific discipline or several disciplines, through their place in the academy or their relationship to the other liberal arts and sciences. Whatever approach is taken, making the course comprehensive yet integrated is critical to its effectiveness. We hope that our experience can provide both the motivation and an example for others in devising meaningful college-entry experiences for adults. Given the current knowledge about adults as developing persons and learners and given the likelihood of more adults with broader needs entering college in the years ahead, serving adult students should be more than a numbers game.

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Module 5

Facilitating Progression Through Recognition of Prior Learning

–Why Recognition of Prior Learning is Important
–Methods of Assessing Prior Learning
–Elements of a Prior Learning Assessment Program
–References
–Reprints

Facilitating Progression Through Recognition of Prior Learning

Preview

One of the most distinguishing characteristics of the adult learner is the reservoir of knowledge and experience each brings to the educational process. The extent of this reservoir ranges from that of a relatively recent graduate who has at least observed professional activities being performed in his/her work setting, to that of the seasoned veteran who is currently functioning in a highly skilled capacity.

While curriculum and instructional methodology can, and indeed must, capitalize on this knowledge base, the progression of adult learners through a program can be significantly accelerated through a formal recognition of prior learning. The benefits of such a process, and the methods utilized to implement it, are just some of the areas discussed in this module.

Goals

In this module, you are invited to:

- Recognize the benefits of prior learning assessment programs to adult learners as well as their host institution
- Evaluate the relative effectiveness and efficiency of various approaches to prior learning assessment
- Evaluate a model policy for assessment of prior learning in terms of its potential utility in your institutional setting

Why Recognition of Prior Learning is Important

Key Issues

For many adult learners, the assessment of prior learning is crucial to determining whether the institution in which they are participating or plan to participate respects them as adults. "Don't treat me like an 18-year-old!" is the plea frequently heard by the frustrated adult learner who finds that the years of experience she/he has accumulated -- and more importantly the learning that has resulted from that experience -- has little or no value in the educational system.

Institutions that acknowledge the value of experience know that learning is learning, whether it occurs in a classroom, a business, the military, volunteer work, or home study. These same institutions also know that it is the *learning* -- not the experience, per se -- which must be recognized and credited.

Many educators are justifiably concerned about awarding credit for prior learning that has not been rigorously evaluated. However, properly administered, a program of prior learning recognition can produce a variety of benefits, both tangible and intangible:

- Increase in student recruitment
- Improvement of student retention
- Enhancement of learner confidence and self-esteem
- Improvement of learner motivation
- Increased learner understanding of personal goals
- Increased learner ability to manage one's own education (self-direction)

Question

What is your attitude toward the idea of prior learning assessment?

A sound and rigorous program of prior learning assessment has a constructive, confidence-building effect. At Empire State College in New York, graduates rated assessment of prior learning as the most significant educational experience of their college career (Schlossberg, Lynch, & Chickering, 1989).

Article

The following article briefly discusses the historical context for prior learning assessment, and provides a close look at one approach for evaluating prior experience. Read the article, which is reprinted in the back of the module. Then return to this page and answer the questions that follow.

Jacobsen, C. M. & Menson, B. (1986). No matter where you learned it: Assessment of experiential learning. In P. Dewees (Ed.), *The assessment of prior learning: A critical adult learner service.*

Question

What benefits did students derive from their experience in developing portfolios?

Question

How might the assessment of prior learning contribute to the outcomes assessment movement currently affecting academic institutions?

Methods of Assessing Prior Learning

Examples

There are several methods for assessing prior learning. Portfolio development, which is typically used to document prior college-level, non-sponsored learning, is one such method. Other common approaches are listed below.

- Equivalency procedures and credit recommendations such as those offered by the *New York Regents' Guide to Educational Programs in Non-collegiate Organizations*, the *ACE National Guide to the Evaluation of Educational Experiences in the Armed Forces*, and the *ACE Guide to Educational Credit for Training Programs*
- Standardized proficiency examinations such as the ACT/PEP, CLEP, CEEB/AP and other proficiency tests such as those listed in the *ACE Guide to Credit by Examination*
- Departmental challenge examinations
- PONSI - Program On Non-collegiate Sponsored Instruction

Questions

Which of these methods, if any, does your institution use to assess prior learning? How would you evaluate the effectiveness and efficiency of the method(s) used?

Elements of a Prior Learning Assessment Program

Key Issues

Virtually all nationally recognized university programs serving the adult learner provide some mechanism for the assessment of prior learning to meet degree requirements. These mechanisms vary in terms of the following:

- Type of learning credited
- Allowable assessment measures
- Evidence of learning required
- Limits on amount of assessment credit
- Evaluation model utilized

Paper

An attempt to standardize these mechanisms has been made by the American Council on Education. Their model policy is described in the following position paper, reprinted at the end of the module. Read the article, then return to this page to answer the questions that follow.

American Council on Education. (1987, June). ***Model policy on awarding credit for extrainstitutional learning.***

Questions

Does your institution currently have a policy regarding assessment of prior learning? If so, how does it compare to the model described by ACE?

Questions

What barriers or limitations do you foresee in implementing the ACE model for awarding credit for extrainstitutional learning? What strategies could be utilized to overcome these barriers?

Resources

The Council for Adult and Experiential Learning (CAEL) was created to serve a visible and significant leadership role in promoting the standards of good practice in the assessment of prior learning. Their *New Directions Sourcebooks* provide convenient compendiums of of the latest knwoledge and practical experience on topics such as prior learning assessment. For information, contact:

CAEL
Council for Adult and Experiential Learning
10840 Little Patuxent Parkway, Suite 203
Columbia, MD 21044
(301) 997-3535

The American Council on Education, Office of Educational Credit and Credentials has also exercised a leadership role in the area of prior learning assessment. For more information on this organization contact:

ACE
American Council on Education
1 Dupont Circle, Suite 800
Washington, DC 20036
(202) 939-9300

Application

If your institution already has a program for assessing prior learning, find out more about it by applying the following questions. Look for areas of potential improvement based on your findings and take steps to implement needed changes.

Purpose: What are the purposes of assessment for adult learners?

- credit
- placement
- waivers
- planning future learning
- process learning

Measurement Options: How can assessment be accomplished?

- traditional (written and/or oral) examinations
- standardized tests
- portfolio
- others (products, demonstration, simulation)

Administration Options: Who handles assessment?

- centralized or decentralized?
- student services or faculty?

Policy Options: What rules are in effect?

- type of credit permitted
- amount of credit permitted
- transcript questions (identification of prior learning assessment, delay in recording credit?)
- grading (letter, pass/fail, ungraded)

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No Matter Where You Learned It: Assessment of Experiential Learning

by Carolyn McKinnell Jacobson and Betty Menson

One of the most striking characteristics of industry is the tremendous impact of computer-based technologies. Some experts maintain that these new technologies may represent a force equal to the shift from an argicultural to a manufacturing economy which occurred in the late nineteenth century. Dennis Chamot, Assistant Director of the AFL-CIO's Department for Professional Employment, puts it this way: "We are in the midst of a revolution that will leave virtually no form of work unchanged."

"This is not a problem for 1990; this is a problem for 1982," states Harley Shaiken, a work and technology specialist at MIT. Technological displacement is occurring everywhere from manufacturing to supermarket check-out counters to libraries.

What effect is all this having on the worker? Some workers will find their jobs eliminated, or the number of jobs reduced in such areas as steel, coal, automobiles and printing. At the same time, however, new technologies are establishing new industries in computers, robotics and video games. The problem for the worker then becomes one of acquiring the necessary skills or credentials to be able to obtain new jobs being created by the technological revolution.

Due to this rapid rate of change, many workers find that learning does not stop with graduation from high school. In order to keep pace with the many areas of change that affect their daily jobs, workers often attend seminars or workshops, or engage in other types of in-house training programs. Indeed, we have all become lifelong learners as we attempt to keep up with technological and social change. Such learning experiences, however, provide only a partial solution for employee.

If industry is to meet its responsibility to workers, it is imperative that the human resource development specialist has an overall vision of career development, and is familiar with alternative methods of helping employees achieve their objectives. "The program leader needs to be enough of a philosopher to have a clear vision to give clear signals to others" (Otte, 1982). Not only must that person understand the dynamics of the particular industry or agency, he or she must be able to identify those programs that offer a simple but cost effective method for some employees to implement their career activities. Though many organizations tend to believe career development should be identified by the individual, an organization that does not encourage development of its employees will probably be unable to meet the demands of rapid technological changes.

Experiential Learning

One method for providing opportunities for career development lies with a new type of program offered through a number of colleges and universities which now makes it possible for adults to earn college credit for learning derived from a variety of life experiences. These experiential learning programs have proven beneficial not only to the employee seeking the necessary credentials to move ahead, but also to the employer seeking a cost-effective way to expand a human resources development program. The basic premise is that we only learn through formal schooling, on-the-job training, or in-house seminars, but we learn informally as we read travel or pursue various interests. We may prepare for a trip to Japan by reading about Japanese management or by learning the language. We may spend long winter evenings reading books on horticulture in preparation for the garden we will plant in spring. Or we may become self-made experts on depression glass, nutrition or the history of our favorite vacation state.

The idea of awarding college credit for experiential learning is not really new. Internships, apprenticeships and field experience have long been recognized as valid learning methods. The difference is that experiential learning is now being extended to include credit for learning which may not have occurred under supervision. Previously, it was necessary to find a supervisor or mentor, map out a plan or project to satisfy certain requirements, obtain approval, and only then was the internship begun or the project launched. With the new experiential learning programs, the learning may not have been supervised, objectives may have been poorly defined, and in fact, the idea of earning formal credit for such learning may not even occur until some time after the learning has taken place.

More than 1,000 colleges and universities in the United States now have programs to assess college-equivalent learning obtained through varied prior activities and experiences not necessarily involving formal schooling (McIntyre, 1981). Credit may be obtained for the series of workshops on data processing or for the knowledge acquired about marine biology on hundred miles from the nearest classroom. It should be emphasized that the individual will not receive college credit for life experiences *per se*, but for the knowledge and skills acquired from those life experiences. The question is not what you did, but what you learned from doing it.

The first step for an individual interested in obtaining credit for experiential learning typically involves sitting down with a staff member or a counselor at an institution offering such credit. Thus it becomes important for HRD directors to develop effective liaisons with educational institutions in their region as well as in their state so that they can make appropriate referrals. This first meeting provides an opportunity to identify areas in which learning has occurred and, in a very general way, the extent of that learning. At some institutions, this will be done by trying to "match" learning with the regular course offerings at that school. In such cases, an individual may want to browse through a course catalog even prior to an initial meeting. The objective of this first meeting is to determine those courses for which an employee might expect to obtain credit based on the learning acquired through life and work experiences.

If it is determined that there is sufficient learning which parallels a number of courses offered at that institution, the next step is the compiling of a portfolio documenting this learning. At some institutions, this portfolio is developed through individual or group counseling, while elsewhere, it may be the major tangible outcome of a credit course designed to help the adult clarify his or her values (what is important to that person, what he or she wants from a career or from life in general), identify careers that fit with his or her interests, skills and values, and make a thoughtful, informed decision about what of these careers to pursue.

The portfolio, which is compiled by the individual seeking credit, is an extensive notebook including a biographical sketch of the individual, a statement of goals and a description and documentation of the learning to be assessed. The biographical sketch, a kind of resume, provides a summary of the individual's past experiences. The statement of goals forces an individual to think about and articulate directions in which he or she would like to move. The lengthiest part of the portfolio is the documentation of learning. This may include certificates of attendance at workshops or conferences, awards or recognition of achievements, letters from previous employers or various kinds of evidence to support the main body of the portfolio, the learning statements. Formulating these learning statements requires the individual to review his or her life experiences and analyze them in terms of learning outcomes: what, specifically, was learned from those experiences. This process not only leads an individual to analyze past experiences, but he or she also learns a model and a process which can be applied to future experiences in career development.

There will be number a number of learning statements for each course to be assessed. For example, a person seeking credit for a course in magazine feature writing might have one statement that says, "I have learned about the legal rights of a writer when submitting an article, and I have learned about copy-right laws from first-hand experience." Another person, seeking credit for a course in office machines, might state, "I learned to type camera-ready copy with justified margins using an IBM electric typewriter. I taught myself to program a TI-58 programmable calculator and wrote a program for a t-test for analysis of two independent variables."

In terms of the content of learning statements, perhaps the best summary is provided by a faculty member who conducted a guide for experiential learning students with these words:

> If you think that you have experiences that would warrent (public speaking) credit that do not fit what is suggested, prepare a portfolio and send it in for evaluation. Experiential learning produces unique sets of qualifications for credit. Your experience may be unique and still warrant (public speaking) credit.

Once the portfolio is assembled, it must then be determined whether the learning thus documented merits college credit. At this point, the learning outcomes and supporting documentation are grouped by subject and divided into "mini-portfolios," one for each course for which the individual is seeking credit. Each mini-portfolio is then submitted to a faculty member who regularly teaches that particular course. The faculty member reviews the mini-portfolio and determines whether or not the learning as it is presented is comparable to that demanded of students enrolled in the course. If credit is granted, the course is listed on the individual's transcript with the appropriate number of credit hours awarded.

Although the faculty member may take a decision based solely on the mini-portfolio presented for assessment, he or she may also require some additional evidence of learning. This may involve interviewing the person seeking credit to further determine the depth of knowledge acquired, requiring some demonstration of the competency claimed (such as a tape recording of a speech for public speaking credit), or actually playing the piano for applied music credit. If the individual demonstrates adequate learning in some but not all areas of knowledge covered by a course, the faculty member may agree to grant credit only after additional learning takes place in the area of deficiency. In short, a variety of techniques may be used to supplement the mini-portfolio in order that the credit may be awarded.

Assessment of experiential learning, however, is not for everyone. Preliminary screening interviews are often used to determine if the individual's learning can be assessed, and if there is indication of sufficient prior learning to justify the time and effort involved in assembling a portfolio. In addition, the very nature of the process requires a person who is self-motivated and able to work relatively independently in documenting the learning acquired from life experiences. Because the portfolio is a written document, communication skills also become a significant factor. To assist would-be participants in this area, some experiential learning programs are now offering a preliminary course in communication skills prior to admission to the program.

The value of experiential learning programs to the individuals involved goes far beyond the academic credit which may ultimately be awarded. Frequently in assembling the portfolio, the person who has felt somewhat inadequate for lack of a college degree comes to realize how much he or she has learned in the proces of living. The man or woman who has owned and operated a business, directed a local political campaign, or moved up through the corporate structure becomes aware that a wealth of knowledge is not only equivalent to classroom learning, but also merits college credit. The individual's self-concept is enhanced and he or she becomes aware of new potentials and options.

A second outcome of the experiential learning program is the identification of one's values and the development of goals. As one experiential learning student put it, "My involvement in the portfolio class marked a turning point in my life. The single most important outcome of this involvement was a self-examination of my personal and professional goals. The contact and concern of the Lifelong Learning staff motivated me and provided me with the confidence to know that undergraduate degrees are no longer a dream to those who are over 25 years-old." Developing a portfolio gives one the opportunity to reflect on past accomplishments, not only in terms of what was learned, but also in terms of what one regards as a source of pride or a major accomplishment. Examination of past experience assists in the identification of personal values, which can then be used as criteria in making decisions about the future. For example, someone might come to realize that job security is more important than the opportunity to supervise others through his or her work, or that the jobs enjoyed most had a lot of variety built into them, or provided a high degree of independence and that a high salary was less valued. This review of past experiences also becomes the basis for developing goals for the future. Such goals can provide the impetus for moving ahead or possibly even changing careers or directions within the same company.

Such self-examination is of benefit both to the individual and to the individual's employer. Many corporations are beginning to increase the scope of their personal departments by adding human resource development as an important emphasis. Workshops are being developed and offered to employees to enable them to become more aware of career options available in their companies. According to many in the personnel field, job satisfaction is increasingly looked at as a key to increasing productivity and output. However, despite sensitivity to career development and employee satisfaction, there are still time pressures on personnel departments which make it very difficult to provide career counseling and to enhance employee development. Experiential learning programs enable business and education to work together, either with individual employees or with groups of employees. Through a Kellogg Foundation grant to the Educational Commission of States, linkages are already occurring in Ohio among corporate leaders and educators who realize that career development may require a pooling of expertise, and that doing so enhances not only the long-term success of both organizations but also the individual employee's satisfaction.

Conclusions

As rapidly changing technology results in job obsolescence, and shifting demographics result in increased job completion, more adults are looking to a variety of educational resources as a way to achieve upward mobility, to move into a new career or to explore new options within their present corporate structures. Statistics have shown that the average adult will make five career changes in a lifetime. Even those who remain in the same career find that they must continually educate themselves just to keep abreast of the new developments in the field. Institutions of higher learning are responding to this need through the development of a variety of new programs for the adult. Assessment of experiential learning is certainly one important way of doing this.

This paper addresses one type of program allowing employers and educational institutions to work together to expand the worker's opportunities for career development. Numerous other kinds of programs are also available for adults who are employed full-time, part-time or not at all. Increasing numbers of home study courses make it

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possible for the adult to complete a course in the comfort of his or her own living room. In some cases, an adult may opt for course credit by exam, skipping the periodic assignments and exams, and receiving credit for a course by simply reading a text or other assigned materials and passing an exam based on those materials. External student programs enable students to design a program of study, in consultation with a trained counselor, and earn an undergraduate degree without physically having to be on campus. The growth of educational reciprocity among colleges and universities makes it much easier for an adult with college credits from several institutions to transfer those credits to one university without major losses and apply them toward a degree. Additional innovative programs are available at institutions across the country. Whatever form these programs take, these new faculty-designed options for learning are serving to bridge the gap between the career development needs of employees in industry and the services and resources of educational institutions.

Despite the variety of ways to earn college credit and the various forms of tuition aid plans that exist in many companies, the average employee participation rate in such plans is around four percent nationally (Rosow, 1980). In attempting to identify why this might be so, Charner (1980) surveyed 910 workers covered under negotiated tuition-aid plans. Among the reasons cited for non-participation were inadequate counseling (mentioned by 50.7 percent) and inadequate program information (43.6 percent). Such barriers must be recognized, understood and removed if more employees are to utilize these plans. Workers, unions, employees and educators must be involved in the development and implementation of tuition-aid plans if these and other barriers are to be overcome (Charner, 1980)

Evidence that barriers can be surmounted is provided by the Kimberly-Clark Corporation's Educational Opportunities Plan (Rosow, 1980). Pursuing a mandate to design the "best educational plan in the U.S.," Kimberly-Clark put together a program combining an innovative plan structure, an extensive system of administration, and a supportive corporate environment. The result was that approximately 35 percent of eligible employees participated in the plan, a significantly greater percentage than the four percent national average cited earlier.

When the adult becomes the focus for both industry and education, the combination of efforts can enhance not only career development but also the employee's sense of self. Everyone wins!

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MODEL POLICY ON AWARDING CREDIT FOR EXTRAINSTITUTIONAL LEARNING

American Council on Education
The Center for Adult Learning and Educational Credentials
Washington, DC

Extrainstitutional learning is defined as learning that is attained outside the sponsorship of legally authorized and accredited postsecondary education institutions. The term applies to learning acquired from work and life experiences, independent reading and study, the mass media, and participation in formal courses sponsored by associations, business, government, industry, the military and unions.

I. EXAMPLE STATEMENT OF GENERAL POLICY

Degree credit shall be awarded for postsecondary-level extrainstitutional learning. Such credit awards shall be made under protocols designed to assure that reliable and valid measures of learning outcomes are or have been applied.

RATIONALE

Adult students are demanding that their learning acquired in extrainstituitonal settings be assessed and that appropriate degree-related credit be awarded. This is a reasonable request and also one in keeping with the national interest. Full and effective use of all educational resources is a worthy educational and social goal. Achieving this goal will depend to a large extent on providing equitable recognition for extrainstitutional learning.

American society abounds in resources for learning at the postsecondary level. Postsecondary education institutions legally authorized and accredited to award degrees and other educational credentials accordingly have a special responsibility to assess extrainstitutional learning as part of their credentialing function.

Educational credentials have a significant bearing on the economic, professional, and social status of the individual. It follows that social equity requires that equivalent learning regardless of where and how it is achieved be incorporated into the system of rewards for learning and competency. Recognition encourages learning and contributes to teaching effectiveness. Teaching students what they already know is both stultifying to them and wasteful of educational and personal resources.

Through reliable and valid assessment of extrainstituitonal learning, more persons can be enabled to enter college and work successfully toward degrees and other academic goals. Many of these individuals are those who have been educationally disadvantaged in the past.

II. EXAMPLE POLICY FOR ADMINISTRATIVE RESPONSIBILITY

Responsibility for administering policies and procedures for awarding credit for extrainstitutional learning rests with the Academic Vice President (or other designated senior academic official).

RATIONALE

Awarding credit is an academic matter. Therefore, administrative responsibility for the policies and procedures pertaining to awarding credit for extrainstitutional learning should be assigned to the institution's senior academic official. Policy implementation and application may be delegated to other institutional officials such as deans, department chairpersons, and registrars. However, oversight of their policy implementation and application is performed by a senior academic official.

EXAMPLE OF APPLICATION OF THE POLICY

The academic vice president delegates to the institutional registrar the responsibility for transcripting credit awarded on the basis of recommendations in the ACE Guides (The policy was approved through the institution's usual governance procedures.) and provides the registrar with guidelines for performing this responsibility. Included in the guidelines are a series of steps to follow in determining how to apply the ACE credit recommended for a course whose title is not the same as the title of any course offered by the institution.

The ACE guide recommends 3 semester hours in automotive maintenance, but the institution's courses are more specific and carry titles such as Tune-Up I, Auto Brakes, and Automatic Transmission I. In accordance with the guidelines, the registrar compares course descriptions in the institution's catalog with the course description in the Guide, finds that the learning outcomes acquired through Tune-Up I match very closely the learning outcomes acquired through the military's automotive maintenance course, and transcripts 3 semester hours in Tune-Up I.

III. EXAMPLE POLICY ON LEARNING THAT WILL BE EVALUATED AND WHO WILL CONDUCT THE EVALUATIONS

Extrainstitutional learning related to subject areas, courses and programs of study will be evaluated for registered students. Established institutional evaluation procedures will be followed, using one or more of the authorized publications and methods for effecting assessment. Students of any age may apply for credit for extrainstitutional learning at any time during a period of enrollment.

RATIONALE

The learning that is evaluated must be in subject areas in which faculty expertise is available or in which expertise can be arranged. This expertise is essential for conducting evaluations and making credit-award decisions. If subject-matter experts do not conduct the evaluations and make the decisions, the credibility of the activity is suspect.

While the great majority of students requesting credit for extrainstitutional learning will be of relatively mature years, it is possible that "young students" may have acquired learning in extrainstitutional settings. Providing a student can document the attainment of appropriate learning outcomes, he or she should receive credit regardless of age. While most applications for award of extrainstitutional learning credit will be received at the time of enrollment from new students, it is possible that students already enrolled may realize that they, too, have extrainstitutional learning experiences that might qualify for credit awards. It is also possible that enrolled students, especially those who are employed, will continue to learn in noncollegiate settings, and will want their learning assessed. Student initiatives with respect to extrainstitutional learning assessment shall not be limited or restricted to the initial term of enrollment.

EXAMPLE OF APPLICATION OF THE POLICY

A 19-year old student has been enrolled at Local College for two years and is about to enter her junior year. At the time of enrollment, it did not occur to her that the foreign language requirement might be satisfied with a language other than one of those taught at the institution. This student's parents were refugees from Hungary who entered the United States in 1958. The Hungarian language is spoken in the home and the student speaks the language fluently. The student is able to document to the satisfaction of the institution's language faculty, through evaluation done by a person in the community fluent in Hungarian, that she is, indeed, proficient in Hungarian. She received 6 credits in Hungarian that satisfy the foreign language requirement for the bachelor's degree.

IV. PUBLICATIONS AND METHODS RECOMMENDED FOR USE IN AWARDING CREDIT FOR EXTRAINSTITUTIONAL LEARNING

Nine publications and methods are permitted for use in awarding credit for extrainstitutional learning. These publications and methods are: (1) ACE Guide to the Evaluation of Educational Experiences in the Armed Forces, (2) ACE National Guide to Educational Credit for Training Programs, (3) ACE Guide to Credit By Examination, (4) New York Regents Guide to Educational Programs in Noncollegiate Organizations, (5) College Entrance Examination Board Advanced Placement Program (CEEB/AP), (6) Department challenge examinations and/or faculty end-of-course examinations, (7) Degree-relevant extrainstitutional learning credit awarded and transcripted by other accredited institutions, as well as that credit transcripted by ACE on the Army/ACE Registry Transcript System (AARTS) and the Registry of Credit Recommendations (ROCR), (8) Subject-/matter experts who are not members of the institution's faculty but who evaluate extrainstitutional learning at the faculty's request, and (9) individual portfolios using Council for Adult and Experiential Learning (CAEL) or other standardized guidelines.

In addition, advice on using other publications and methods for awarding credit for extrainstitutional learning may be sought from the American Council on Education.

RATIONALE

For nearly 40 years, the Guide to the Evaluation of Educational Experiences in the Armed Services has been the standard reference work for recognizing learning acquired in the military. More recently the National Guide to Educational Credit for Training Programs and the Guide to Credit By Examination have attained similar stature. ACE has worked cooperatively with the Department of Defense, the armed services, business, industry, labor unions, and other organizations providing education and training, and test publishers, as well as with accredited colleges and universities in developing the credit recommendations presented in the Guide series. All recommendations carried are the result of careful and periodic review by evaluation teams that consist of university and college faculty members who are subject-matter experts. All evaluation teams work under policies and procedures approved by the ACE Commission on Educational Credit and Credentials and under protocols and supervision provided by the staff of the ACE Center for Adult Learning and Educational Credentials. The policies and procedures used to develop the exhibits in the New York Regents Guide to Educational Programs in Noncollegiate Organizations are similar to those used by the American Council on Education.

The CEEB/AP program permits high school students to demonstrate the attainment of college-level learning outcomes; the important factor is that learning outcomes are attained, not where the learning took place (in a high school) or who taught the course (usually a high school teacher).

The practice of administering departmental or individual faculty member challenge examinations or end-of-course examinations is long-standing and permits the faculty members to make direct judgements about the equivalence of learning for specific courses.

Credit transcripted on the basis of extrainstitutional learning should be treated the same as that transcripted for courses; in both instances the faculty of the sending institution has attested to the student's attainment of required learning outcomes. Credit transcripted on ACE's Army/ACE Registry Transcript System (AARTS) and Registry of Credit Recommendations (ROCR) for the Army component of the Military Evaluations Program and participants in the Program on Noncollegiate Sponsored Instruction (PONSI) should also be treated as that transcripted for courses; in these instances, teams of faculty members from accredited colleges and universities have evaluated the learning and judged its equivalence to learning acquired on campuses.

Sometimes the expertise to evaluate extrainstitutional learning is not available on the faculty; in these instances, the faculty can designate an expert to conduct the evaluation. Criteria for selection of "outside" experts should be established.

The portfolio assessment guidelines promulgated by CAEL are widely accepted by faculty assessors and are considered exemplary. The portfolio provides a reliable method for evaluating learning outcomes acquired individually, as opposed to a set of learning outcomes acquired by large numbers of persons, such as through a course offered by the U.S. Army for soldiers.

EXAMPLE OF APPLICATION OF THE POLICY

A student (soldier), upon entering Local College, provides an AARTS transcript that confirms completion of a course entitled "Advanced Geodetic Surveyor" at the Engineer School, Ft. Belvoir, Virgnia, in October 1981, while holding the rank of sergeant in the U.S. Army. Information on the transcript and in the ACE Guide to the Evaluation of Educational Experiences in the Armed Services indicates that the soldier completed this course when it was taught at Ft. Belvoir between January 1977 and November 1983. Its objectives were to train warrant officers and senior noncommissioned officers in advanced geodetic survey techniques. The course was delivered by means of lectures and practical exercises in advanced geodetic surveying techniques including map compiling, vertical and horizontal control surveys, gravity , astronomic observations, and mathematics. The Guide recommends that a college or university award 6 semester hours in geodesy at the upper division baccalaureate level; this recommendation also appears on the AARTS transcript. After review of this recommendation, Local College awards this student 6 semester hours of credit in geodesy toward completion of a planned major in mathematics.

V. EXAMPLE POLICY ON MAXIMUM NUMBER OF CREDITS THAT MAY BE AWARDED FOR EXTRAINSTITUTIONAL LEARNING

The maximum number of credits that may be awarded for extrainstitutional learning is three-fourths the number required for a degree.

RATIONALE

Most postsecondary education institutions have a requirement that stipulates that a minimum of one-fourth of the credits required for a degree must be earned in residence. The balance of the required credits, then, could be awarded on the basis of extrainstitutional learning. However, the credits awarded for extrainstitutional learning and those earned in residence would have to satisfy all degree requirements before a degree could be awarded. In the absence of a residency requirement, all degree requirements conceivably could be met through extrainstitutional learning.

EXAMPLE OF APPLICATION OF THE POLICY

John Smith is a newly registered student at Local College. He is a financial vice president of a major U.S. corporation, CPA, and licensed realtor; he is fluent in three foreign languages--German, French, and Spanish; he has published seven articles in domestic and foreign journals and has contributed chapters in two books on international economics; he is knowledgeable about foreign countries and cultures as a result of having lived abroad for eleven years; and he is proficient in computer programming (COBOL and FORTRAN).

On the basis of Mr. Smith's demonstrated knowledge, skills, and competencies, the faculty awarded him 106 credits. The college requires 124 credits for a degree and has a 24 credit residency requirement. Therefore, Mr. Smith must earn 24 credits in residence. What courses does he take to earn 24 credits? His academic advisers decided, and Mr. Smith concurred, that he lacked knowledge about the environment, a special focus and thrust of the college's general education requirement. He took courses to satisfy this requirement and was awarded a degree.

VI. EXAMPLE POLICY ON RECORDING CREDITS AWARDED FOR EXTRAINSTITUTIONAL LEARNING ON TRANSCRIPTS

The credit awarded for extrainstitutional learning shall be transcripted in the same manner as credits awarded for course completions.

RATIONALE

The faculty members have either evaluated the learning or approved the other means by which credit can be awarded. They have verified that learning has occurred and is equivalent to the learning acquired in their courses and programs. Therefore, special notation or differentiation of courses and credits awarded on the basis of extrainstitutional learning is unnecessary.

EXAMPLE OF THE APPLICATION OF THE POLICY

Examples of the way in which Mr. Smith's credit was transcripted are:

Accounting 261 - Financial Information Systems - 3 semester hours

Accounting 360 - Financial Reporting Theory and Practice - 3 semester hours

Computer Science 251 - Principles of Programming - FORTRAN - 4 semester hours

Computer Science 252 - Principles of Programming - COBOL - 4 semester hours

German 101 - Elementary German - 4 semester hours

German 201 - Intermediate German - 4 semester hours

German 309 - Advanced Conversation - 3 semester hours

VI. EXAMPLE POLICY ON RETENTION OF THE DOCUMENTATION OF EXTRAINSTITUTIONAL LEARNING

Documents used to verify the award of credit for extrainstitutional learning shall be retained for one calendar year.

RATIONALE

The length of time documentation for the credits awarded for extrainstitutional learning shall be retained should be consistent with the length of time documentation for credits awarded for classroom learning are retained.

Consistency facilitates equitable handling of student documents and represents sound recordkeeping practices.

EXAMPLE OF APPLICATION OF THE POLICY

Local College keeps students' final exams on file for one calendar year, after which they are shredded. Mr. Smith's documentation -- copies of articles and chapters he authored, copies of his computer programs, notes and summaries of inteviews faculty members had with him, etc.-- were kept on file for one calendar year and were then shredded.

VIII. STUDENT FEES FOR ASSESSING EXTRAINSTITUTIONAL LEARNING

A fee for the assessment of extrainstitutional learning shall be charged.

RATIONALE

Assessing extrainstitutional learning, transcripting the credits awarded, etc., are valuable services to students. These services require faculty and staff time. Students, should, therefore, pay a fee for these services just as they pay fees for other institutional services.

EXAMPLE OF APPLICATION OF THE POLICY

The fee for assessing extrainstitutional learning and transcripting the results at Local College is based on its average hourly salaries for various faculty ranks (assistant professor, professor, etc.) and administrative positions plus the costs for benefits and administrative services which are computed as percentages of salaries. The average hourly salaries are multiplied by the amount of time spent in performing the evaluation and administrative functions, rounded up to the half-hour. The fee for assessing Mr. Smith's extrainstitutional learning and transcripting the results was $880.

IX. EXAMPLE POLICY ON OVERSIGHT OF THE "PROGRAM"/ACTIVITY

An Oversight Committee, broadly representative of the institution's divisions/departments, shall be appointed (by the "program" administrator or through the institution's usual means of appointing committees). The major function of this committee is to review the credit award decisions to assure consistency across the institution.

RATIONALE

To protect the integrity and credibility of the activity, consistency is absolutely necessary. If either the faculty or the students perceive that credit awards are made capriciously, their confidence in the activity will be lost. When this occurs, the activity will no longer be viable.

EXAMPLE APPLICATION OF THE POLICY

The Oversight Committee detected that, when a faculty evaluation team for portfolio assessment was comprised of three specific faculty members, the credit awards seemed overly "generous." The Oversight Committee recommended to the administrator that these three faculty members not comprise a team. The administrator discussed the credit-award information with the three faculty members, and they agreed with the Oversight Committee's recommendation, which was then implemented.

X. EXAMPLE POLICY ON "PROGRAM" EVALUATION

The "Program" for assessing extrainstitutional learning shall be evaluated on an annual basis by the academic vice-president or his designee(s).

RATIONALE

It is sound administrative practice to evaluate "programs" on a regular basis to determine if "program" objectives are being met. It is especially important to evaluate new "programs" so that problems are detected early on and changes can be made, if necessary. Evaluation should probably be done jointly by "program" staff and the staff of the Office of Institutional Research.

EXAMPLE OF APPLICATION OF THE POLICY

At Local College, responsibility for "program" evaluation is assigned to the Office of Institutional Research, but the Office involves the "program" staff. "Program" evaluation includes but is not limited to, an indepth look at the academic performance of students who have received credit for extrainstitutional learning. Recent data showed that their overall performance, in terms of GPA, was higher than that of the student body as a whole; the average number of credits carried each semester was equivalent to the average number carried by the student body as a whole; they were enrolled in all academic departments of the college, etc. Credit awards were examined by age categories and by assessment instrument used. This information was useful to the college faculty and administrators in deciding to continue the "program."

Module 6

Designing Curricula for the Adult Learner

–The Importance of Curriculum
–The Competency-Based Curriculum
–The Impact of CBE on the Educational Setting
–Building an Adult Learner Curriculum
–References
–Reprints

Designing Curricula for the Adult Learner

Preview

Adults return to school for a variety of reasons. While some may return to obtain the qualifications necessary to retain or advance beyond their present job, others seek knowledge to prepare for new careers or to enrich themselves personally. Regardless of the reason, these individuals expect both the institution and the particular curriculum they have chosen to reflect their particular needs.

In reality, most curricula lack a thorough understanding of the needs of the learners they are intended to serve. Instead, such curricula are usually a function of institutional need and available resources. For adult learners, who are usually pragmatic and sensitive to the quality of their educational experience, the goals and content of the curriculum are of paramount importance.

Goals

In this module, you are invited to:

- Recognize the potential inconsistency between the culture of the adult learner and the types of curricula traditionally provided in institutions of higher learning
- Explore the validity of the competency-based curriculum and evaluate its impact on institutional resources, faculty roles, and student-teacher relationships
- Re-evaluate your own institution's curricula and curriculum planning processes in light of adult learner needs

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Key Issues

In Module 3, the issue of educational access was described as a major barrier for the adult re-entry student. Because access is so crucial to the success of adult learner programs, the tendency of many institutions is to invest their available resources into alleviating this initial barrier. Few institutions are able to look beyond this issue to see if the programs they offer are really providing what adult learners need.

Article

The following article discusses the consequences of this thinking and what can be done to improve curriculum for adult learners. Read the article, which is reprinted at the end of the module. Then return to this page and answer the questions that follow.

Olivier, M., & Mahoney, F. (1987, April). Curriculum: The Forgotten Agenda in Adult Higher Education. *CAEL News*.

Questions

Do you agree with the authors' premise that a culture gap exists between traditional institutions of higher education and the adult learner? What evidence or experiences support your response?

Questions The article presented some criticisms of adult education programs. With which of these criticism do you agree? With which do you disagree, and why?

Question In the article, Olivier and Mahoney suggest reframing certain assumptions that underlie curriculum planning in traditional institutional settings. Which of these revised assumptions could you integrate into your own curriculum planning efforts?

Question What barriers do you envision in implementing the four-point agenda presented by Olivier and Mahoney?

The Competency-Based Curriculum

Definition

While it has yet to be embraced by the academic community, the concept of the competency-based curriculum holds some promise as a model for adult learner programs. The competency-based curriculum is based on the assumption that the competencies required for successful performance in a specific role can be identified and taught. Satisfactory completion of a competency-based program is not based on the number of courses taken or hours accumulated, but on the successful demonstration of behaviors associated with the competencies required.

In additional to these basic assumptions, there are six critical elements that characterize CBE:

- *Learning Outcomes* -- must be explicit with regard to criteria for performance, and known and agreed upon by all those directly involved with the student's progress.
- *Time* -- must be used flexibly in terms of when, how long, and how often opportunities for both instruction and evaluation are provided.
- *Instruction* -- must facilitate opportunities for all students to reach established standards by providing a variety of instructional activities to help them achieve required outcomes.
- *Measurement* -- must entail explicit, criterion-referenced testing of required outcomes and there must be frequent opportunities for evaluation.
- *Certification* -- must depend on demonstration of required outcomes, exclusive of attendance or other bases for determining eligibility.
- *Program Adaptability* -- must be assured through a sensitive management system.

Question

What are your experiences, if any, with competency-based curricula? Did these curricula fit the description above?

Key Issues

Competency-based education or CBE was originally conceived as "a response to the demands for accountability, relevance, and cost-benefit analysis" (Hertling, 1974). Berquist (1977) identified three reasons why the concept of CBE was likely to persist.

- It focuses increased attention on educational outcomes
- Graduates of competency-based programs can better document job-related skills, knowledge and attitudes
- Competency-based programs provide a convenient vehicle for integrating liberal arts and career education

Despite these advantages, educators have traditionally dismissed CBE as inappropriate for the academic disciplines. While it is true that the competency-based approach tends to work best with vocational programs, where occupational skills can be delineated and broken down relatively easily, the work of colleges such as Alverno, Sterling, and Mars Hill have demonstrated that it is possible to define competency-based curricula for the liberal arts. Stark & Lowther (1986) analyzed various professions for their common attributes and have identified generic competencies for the professional disciplines.

Article

CBE has gained renewed interest in view of the recent trend toward outcomes assessment in institutions of higher learning. Derek Bok discusses this connection, as well as the pros and cons of CBE, in the following article, which is reprinted at the end of the module.

Bok, D. (1986, November/December). Toward higher learning. *Change.*

Question

Why is the competency-based approach particularly well-suited to adult education programs?

Question

In what way does the notion of CBE support Knowles' assumptions that adult learners in general tend to be more task-oriented and self-directed in their approach to learning?

Question What is the significance of CBE in view of the movement toward student outcomes assessment?

"Competence, by definition, is tied to a position or role. The ligatures binding the two are abilities, knowledge, skills, judgment, attitudes, and values for successfully functioning in the position or role. That is, possession of the critically acquired abilities, knowledge, skills, judgment, attitudes, and values--and proficient use of the same--is what yields competence in an individual"

Gale & Pol, "Competency: A definition or Conceptual Scheme?"

The Impact of CBE on the Educational Setting

Key Issues

The implications of the competency-based approach on the educational setting is potentially profound, as one can see by comparing the conventional and competency-based modes of instruction (see chart on following page). The CBE approach, for example, forces institutions to shift resources from the best student to the average and below-average student. Such students, who may have passed unnoticed in traditional curriculum, are much more visible in a competency-based format. Other changes necessitated by CBE at the institutional level involve the following:

- Instructional content derived from adult life functions rather than subject discipline knowledge bases
- Comprehensive curriculum articulation rather than discipline-specific curriculum planning
- Interactive rather than one-way communication between institution and client

For faculty, competency-based education means spending less time performing and more time observing the performance of others. It also encourages interdisciplinary dialogue about the desired outcomes of a college education and the means to assess them. One of the most threatening aspects of CBE is its strong emphasis on accountability. In the CBE mode, faculty and institutions can be held responsible for student achievement of predetermined outcomes.

The table on the following page illustrates the differences between the CBE appproach and conventional curricula.

TABLE 6-1: COMPARISON OF CONVENTIONAL AND COMPETENCY- BASED APPROACHES TO INSTRUCTION

Conventional Approach	Competency-Based Approach
Content based	Competency based
Time based	Performance based
Group based	Individual based
Group needs	Individual needs
Delayed general feedback	Immediate specific feedback
Textbook/workbook	Modules and multi-media
Classroom based	Field based
Instructor-dependent	Instructor-supported
General goals	Specific objectives
Norm referenced assessment	Criterion referenced assessment

Questions

CBE invites a certain separation of the teacher from what is being taught. Do you see this as an advantage or disadvantage of the CBE approach? Why? How might the instructor's role change as a result of this approach?

Question

In what ways might CBE actually help an instructor fulfill his or her teaching function?

Question

What impact might CBE have on the student-student relationship?

Resources

Perhaps the most critical step in competency-based education, and the one most unfamiliar to academicians, is the determination of the outcome competencies themselves. Recently, a procedure known to program developers as DACUM (Developing a Curriculum) has provided a systematic means to complete this step. Using 8-12 expert workers from a particular occupation in a 2-3 day structured brainstorming session, the DACUM process yields competencies, and tasks relatively quickly. For more information, see:

Norton, Robert E. (1985). *DACUM coordinator's and facilitator's handbook.* Columbus, OH: The National Center for Research in Vocational Education.

In addition to this resource, several vocational-technical educational institutions have developed competency-based materials in a variety of occupational areas. These materials are listed on the following page.

SOURCES OF CURRICULUM/ COURSE PLANNING MATERIALS

National Network for Curriculum Coordination in Vocational and Technical Education (NNCCVTE). The U.S. Department of Education supports NNCCVTE, which includes six regional curriculum coordination centers. These centers maintain libraries of curricular materials, including occupational analyses, and also have reference documents that might help you locate occupational analyses available elsewhere. To acquire materials on a specific topic, contact the NNCCVTE state liaison representative through your state department of education.

East Central Network for Curriculum Coordination (ECNCC), largest of the six regional curriculum coordination centers in NNCCVTE, is establishing a Task List Access System to promote the exchange of lists of identified tasks workers perform in a given occupation—the tasks students must master to be competent in that occupation. As of this writing, the access file contains about 500 task lists from the major program areas of agriculture, business, health care, home economics, and trade and industrial education. To obtain copies of lists already in the file, contact your NNCCVTE state liaison representative.

The National Center for Research in Vocational Education. Three National Center databases might be of help to you: ERIC, VECM, and RIVE. The *ERIC/ACVE* (Educational Resources Information Center; Adult, Career, and Vocational Education) database includes such materials as research reports, conference papers, program descriptions, literature reviews, curriculum guides, instructional materials, and teaching guides.

The *VECM* (Vocational Education Curriculum Materials) database includes information about such materials as teaching guides, workbooks, learning modules, evaluation instruments, slide/tapes, and microcomputer courseware. The *RIVE* (Research in Vocational Education) database includes information about ongoing and recently completed state and federal vocational education program improvement projects.

You may be able to arrange for computer searches of these databases through your state department of education, bureau or division of vocational education; your NNCCVTE state liaison representative; the NNCCVTE Curriculum Coordination Center (CCC) in your region, or the library system at a major university in your state. Searches can also be conducted for you on a cost-recovery basis by National Center staff (average cost, $25).

State curriculum laboratories. Many states have one or more curriculum laboratories or instructional materials centers that are supported through state department of education funding and/or through membership subscription fees. Some states, such as Ohio, have separate labs for agricultural education, distributive education, and trade and industrial education, while other states have only one lab or center serving all vocational service areas.

Many of these curriculum labs and centers have developed and published occupational analyses. The Ohio State University's Trade and Industrial Education Instructional Materials Laboratory, for example, has released analyses for over 100 occupational areas. These publications are available by job title for a nominal fee from the laboratory. Before beginning a local curriculum development effort, it is advisable to check the status of existing state or regional efforts.

Regional and national consortiums. In recent years, a number of regional and national consortiums have been organized and supported by various states and/or individual institutions to fund the development of occupational analyses and/or curricular materials. Three such consortiums are as follows:

- **Vocational-Technical Education Consortium of States (V-TECS)**—V-TECS produces resource materials for use in curriculum development, program planning, and program evaluation. Over 100 catalogs have been prepared for specific occupational titles.

  V-TECS catalogs include the following: duty/task list, performance objectives, performance guides (steps for performing the task), equipment/tool lists, bibliography of resource literature, and validation information. Some V-TECS catalogs include criterion-referenced measures in addition to the other components.

  Instructors in member states may get the catalogs from their state department of education. Others will need to order directly from V-TECS, Curriculum Publications Clearinghouse; Western Illinois University; 46 Horrabin Hall; Macomb, IL 61455.

- **Interstate Distributive Education Curriculum Consortium (IDECC)**—IDECC, a consortium of 28 states, was established in the early 1970s to develop a competency-based learning system for the improvement of instruction in distributive education. Using a research base of validated competencies for over 100 marketing-related occupations or occupational clusters, the consortium has developed—and is continuing to develop and update—a series of field-tested learning activity packages (LAPs).

  Member states have access not only to these LAPs, but also to a computer management matrix, which helps teachers to plan and manage the CBE program, and which keys competencies to LAPs. The IDECC office is located at The Ohio State University; 1564 West First Avenue; Columbus, OH 43212.

- **Mid-America Vocational Curriculum Consortium (MAVCC)**—MAVCC has available numerous curricular materials in a wide range of occupational areas, including trade and industrial education (e.g., electronics, small engine repair, residential plumbing, health occupations, air conditioning, automotives), home economics (e.g., child care, foods, clothing), agriculture/horticulture, and distributive education/marketing (e.g., merchandising, manufacturing).

  Designated as "units of instruction," these MAVCC materials include objectives, suggested activities, and criterion-referenced tests. Each curriculum manual has a teacher edition. The materials are available to member states (at special prices) and nonmember states from MAVCC; 1500 West Seventh Avenue; Stillwater, OK 74074.

The National Center for Research in Vocational Education. (1987). *Plan Instruction for Adults, Module N-4* . Columbus, OH: The Ohio State University. Reprinted with permission.

Key Issues

Whether it is competency-based or not, the process for building curriculum is the same for adult learners as it is for any other group of learners. However, the assumptions upon which it is built will reflect the needs of the learner population. Ideally, the curriculum should exhibit the following characteristics upon completion:

- The curriculum reflects a conceptual framework that is consistent with the mission of the institution, and the "culture" of target population
- It is a response to an identified need
- It is based on an analysis of purposes and objectives of the program
- The curriculum planning, development, and maintenance incorporate input from appropriate faculty and practitioners
- Course content and materials reflect course and program objectives
- Methods of instruction effectively and efficiently facilitate achievement of course and program objectives
- Criteria for evaluating learner achievement reflect course and program objectives
- There is consistency in the content of courses taught at various sites
- Currency in the curriculum is maintained

Before designing any curriculum, many questions must be answered. At the end of this module you will find a series of questions that will guide your efforts in curriculum-building for adult learners.

Questions

What is your present model for curriculum building? In what ways does your model reflect the reality and constraints of implementation in the real world of curriculum development?

Question

With respect to the questions presented at the end of the module, which questions could you answer with respect to curricula you are currently implementing or plan to develop?

Application

Using the list of questions presented on the following pages, conduct a comprehensive needs and resource analysis on a program you are thinking of implementing. What does your analysis tell you about the feasibility of your program? What other steps or resources would be needed to ensure its success?

PROGRAM DEVELOPMENT ISSUES
Center for Innovative Programs, 1988

I. Analysis of the Problem

A. What is the nature of the problem that needs to be investigated?

B. Is the course or degree program under investigation a new concept to the department or organization?

   1. If so, what is the societal/industrial need for this program? What data do you have to support this need?

   2. If not, why does the department or organization want to change the program?

      a. Is the enrollment low? If so, what major factors have restricted program growth?

      b. Is the attrition rate high?

      c. Are the student evaluations negative?

      d. Is the present program meeting societal and industrial needs?

      e. What program changes are you contemplating?

C. What is the current learning methodology used in the program? Are you considering changing this methodology?

II. Analysis of the Target Population

A. How would you describe the target population in terms of their

   1. Occupation and employment status?

   2. Level of experience?

   3. Educational background?

   4. Cultural background?

   5. Average age?

   6. Geographic location?

B. What personal/situational barriers would such students commonly encounter (i.e., work, travel time, family, etc.)?

C. What institutional barriers would such students commonly encounter?

D. What are the students' expectations of this program? Why would students be interested in this program?

E. What are employers' expectations of what students should learn from this program?

F. Are the students self-directed? Do they need to learn how to become self-directed?

G. What image does the target group have of the institution?

H. How will you market this program to the target population? Will you need assistance?

III. Analysis of Program Administration

A. Who will administer the program? Who is involved in policy decision-making?

B. Who comprises the program faculty? Is the membership permanent?

C. What criteria is required for selecting instructors to implement the proposed program?

1. From what sources (in-house employees; regular tenured or tenure track; part-time; adjunct) have the faculty been recruited?
2. Where is the faculty located in relationship to anticipated student population?
3. What is the level of preparation required of program faculty?

D. What instructional materials are needed?

1. Are any of these materials currently available through internal/external sources?
2. Is there additional funding for instructional development?

E. Are administrators/instructors supportive of adult learning concepts?

1. If yes, which concepts do they support?
2. If no, what is their position with respect to adult learners?
3. Is there a need for additional training in adult learning concepts?

F. What options are available to students concerning:

1. The number of class hours required?
2. The scheduling of classes?
3. Independent study?
4. Sites for instruction?

G. How are students advised?

1. Have the advisors been working with adult learners?
2. If not, is there a need for additional training?

H. Are administrators/instructors supportive of self-directed learning?

1. If yes, how is this support demonstrated in practice?
2. If no, why not?
3. To what extent do students make decisions about what they need to know?
4. May students write contracts for learning?

I. What are the options for accomplishing expected learning outcomes?

1. Are standardized exams available for course substitution?
2. Do additional assessments need to be developed? If so, which ones and what kind?

L. What are your timelines for implementing the program?

IV. Analysis of the Curriculum

A. Has the content of the program been decided? If so, by whom? Which areas are most critical?

B. Can the curricular outcome be expressed in terms of competencies? Will industry professionals have input into the process?

   1. Which areas are most critical?
   2. Which areas are least critical?

C. Have entry level knowledge and skills for the curriculum been determined?

D. Are instruments needed to assess entry level knowledge and skills?

E. What are the admission requirements for the program?

F. Is there an articulation agreement with other educational programs (community college and four-year programs)? How does the program accommodate:

   1. Community college graduates with no job experience?
   2. Community college graduates with job experience?
   3. Graduates of technical/vocational schools?
   4. Students transferring from other four-year institutions?
   5. Students without recent formal college education?
   6. Students with a four-year degree?

G. Have the objectives for each content area been determined?

   1. If so, have the objectives been examined in terms of the whole program and in relation to other courses in the department?
   2. If not, who will define the objectives?

H. Can a list of content experts for these areas be identified at this point?

   1. If so, who are these individuals?
   2. If not, who will be involved in identifying/recruiting these experts?
   3. Would you prefer that we work directly with these experts or through one of your own program representatives?

I. How shall the tasks of new program development be divided?

   1. What tasks shall our organization assume?
   2. What tasks shall your organization assume?
   3. What tasks shall be assigned to content experts?

V. Instructional Resources

A. Does your student body require access to extensive library facilities?

   1. If yes, are the holdings adequate in quantity, diversity, and currency?
   2. What additional resources are needed and what are the plans for securing them?

B. Does your program faculty/student body need to access:

- a learning assistance center?
- media production facilities?
- a computer center?
- instructional television facilities?

   1. If so, which of these facilities are currently available?
   2. Are the facilities available at convenient hours?
   3. Who is in charge of the required facilities?

C. What special facilities and equipment are needed to accomplish the program's objectives, and what are the plans for securing them?

D. What are the space requirements for administering the program?

1. Where will instruction be delivered?

2. What are the plans for securing these sites?

VI. Evaluation of Student Progress

A. Is there a need for a culminating outcome assessment? If so, what kind?

B. Have instruments for measuring student progress been developed? Are you satisfied with the currency, scope, and validity of these instruments?

C. If instruments need to be developed, should effectiveness be measured directly on the objectives of the unit or on the potential for transfer of a skill to a different situation?

VII. Evaluation of the Program

A. Have you considered measuring whether the program is effective for students and industry after it has been implemented?

B. Who should be involved in the summative evaluation of the program?

C. Who will be available to monitor the progress of program development?

D. How will program development be monitored (i.e., regular meetings)?

E. It is beneficial to test out instructional materials as soon as possible and not wait for the course to be developed. Will this type of evaluation be possible? If so, how will it be implemented?

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CURRICULUM: The Forgotten Agenda in Adult Higher Education

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INTRODUCTION

Moving Beyond a Framework of Needs, Access, & Flexibility.
Today, most institutional responses to serve the adult population have been based on a framework of need, access, and flexibility. Over the past decade and a half, the major focus of discussion and effort in adult higher education has been on access and flexibility. We have been concerned primarily with getting the adult into the institution. To that end, we have opened admissions, expanded financial aid opportunities, established counseling and other adult student support services, and developed ways of providing advanced standing through the recognition and assessment of prior learning.

In addition, we have been concerned with getting the institution to the adult, through external degree programs, programming at work sites, and the use of technology for distance learning.

The question of access and flexibility is, indeed, an important one and requires on-going attention. However, access to and flexibility in the degree program itself does not necessarily insure that the educational needs of adults are being well-met. We have reached a point where what and how adults learn needs to concern us as much as why, when, and where adults learn. And we cannot discuss the "what" and "how" of adult learning without examining the role of curriculum in adult higher education.

Curriculum is certainly not a new issue. Curriculum and its reform has preoccupied the collective psyche of higher education professionals for decades. Unfortunately, that preoccupation has overlooked, if not completely ignored, the relationship of curriculum design and structure to the needs of the adult student population.

Despite significant influx of new student populations, the undergraduate curriculum is still designed primarily to serve the younger student. Even in the majority of colleges and universities that serve both younger and older students, the structure of the degree program and the curriculum itself have been designed for the student who has recently completed high school and followed a pre-college course of study.

For the most part, the messages, meanings, and values typical in college curriculum today are based on assumptions about how to educate the relatively well-prepared, academically acculturated, and generally inexperienced, younger person and reflects a set of educational values that may not serve the older student as well.

SOME REASONS WHY CURRICULUM IS A FORGOTTEN AGENDA

An Overview
We believe that there are three aspects to consider when identifying curriculum as a forgotten agenda in adult higher education. One is institutional, centering on the tension between the culture of the campus and the culture of adulthood and on the relationship of adult higher education to higher education. The second is programmatic, dealing with the nature and division of the curriculum in terms of content, structure, and requirements. The third is conceptual. This aspect deals with the educational assumptions and values which support curriculum planning efforts. All three are, in reality, integrally connected. For the sake of this discussion, however, each is considered separately, with special emphasis on the programmatic and conceptual.

INSTITUTIONAL LEVEL

When Cultures Clash
As many practitioners in adult higher education will attest, adapting college and university programs to accommodate the ever increasing numbers of adult learners is no easy task. Serving the adult population raises very complex issues. We believe that many of these problems stem from the fact that we are essentially dealing with two different "cultures": the culture of the college or university community and the culture of adulthood. Culture can be viewed as the invisible force behind the tangibles and observables, a social energy that moves people to act. In many ways, culture is to the organization what personality is to the individual: a hidden yet unifying theme that helps people make meaning and to share common beliefs. Unfortunately, bridging the culture of the college/university and the culture of adulthood requires not only a new framework for developing common beliefs, but also requires a new language to facilitate mutual understanding. As pointed out in a recent article (Olivier, 1986):

> As institutions of higher education continue to wrestle with the questions of how program responses and institutional structures can be reshaped to serve the needs of the adult learner, more attention needs to be devoted to the careful and considered analysis of both cultures. The absence of any serious discussions concerning the fundamental differences between these two cultures will only perpetuate what I call "cultural gridlock," the inability to move toward understanding each other.

Many of the questions and issues being raised today concerning higher education's response to the nation's adults run counter to the norms, values, traditions, beliefs, and assumptions widely held in academia. Colleges and universities, today, still lack the appropriate infrastructures to accommodate the needs of the adult learner.

RELATIONSHIP OF ADULT HIGHER EDUCATION TO HIGHER EDUCATION

Many academics in traditional college and university campuses still view adult education as a second-rate educational activity. Critics are quick to point out that most adult education programs are designed for students who can't succeed in "regular" programs. In addition, these same critics also claim that adult education instructors are of considerably lower quality than "regular" academics.

Many college and university faculty members and administrators are also concerned about academic quality if adjustments are made in entrance procedures, curriculum requirements, and in how courses are taught. Proponents of the adult higher education community, however, are insisting that many of these changes can be made without damaging the integrity and reputation of high-quality institutions. The debates continue to intensify.

PROGRAM LEVEL

Nature and Division of the Curriculum in Terms of Content, Structure, and Requirements
How the curriculum and the courses within it are organized create significant problems for many of us involved in adult higher education. First, there is the question of course integrity. Many faculty and academic officers would argue that a course is an entity in and of itself. Its total is more than the sum of its parts. Thus, it is not possible to break courses into modules for the convenience of adult students who usually have a variety of experiences which touch upon particular aspects of their courses.

A second problem relates to course sequencing. Many degree programs require students to spend at least one-half their time at the institution granting the degree. Such a requirement assures that they have some of the sequenced courses in their program of study. For many adult students, completing a traditional required course sequence is neither practical not educationally effective. Many adult students often attend several institutions. Adult students simply do not have the luxury to do their entire degree program at one institution.

A third problem is the relationship of the courses to the overall curriculum plan. Adult students should be able to see clearly the relationship of every course they take to the overall degree plan. Adult students should not be expected to accept a facile reply such as, "The chemistry course is a prerequisite to other courses you are taking. You can't take these courses without chemistry."

Judgements about introductory courses, course sequencing, advanced courses, aspects of courses, groups within the curriculum degree requirements and so forth need to be re-examined in light of the more heterogeneous, experienced adult audience for whom the what of a college education requires some curriculum modifications and/or adaptation.

CONCEPTUAL LEVEL

Educational and Institutional Assumptions Which Underlie Curriculum Planning

It also seems especially necessary to look at the assumptions which underlie many of the curricula for traditional-aged college students. Based on an analysis of common institutional practices, some of these assumptions appear to be:

1. Students who are admitted have satisfied the minimum requirements for acceptance by the institution and, therefore, should by ready to do college-level work. (Some are not and require remedial or developmental programs, but that is a situation which should be solved by upgrading instruction and the curriculum at the secondary level.) Students learn to do college-level work by doing college-level work with no special preparation by the institution.

2. Students should be exposed to a relatively wide array of disciplines and topics because they lack the experience base of an informed person and might not voluntarily select a broad range of courses, particularly in the general education component of their program.

3. Introductory courses, for example, Psychology 101, should introduce students to the many facets and sub-specialties within the discipline. The purpose is for students to understand the structure of knowledge and the methodology of discovery and scholarship that are characteristic of the discipline.

4. Students should take broad general courses (perhaps interdisciplinary) first and then more narrowly focused courses afterwards as they will have a better context for the more specialized knowledge.

5. Cognitive development, and in particular, the ability to integrate what has been learned will take place without any explicit attention in the curriculum.

While some of these assumptions may have a certain validity to them for the younger student, their effectiveness as a base for a curriculum for adults ought to be at least questioned, if not disputed.

For example, reframed as assumptions underlying adult higher education, they might read:

1. Adults admitted to college vary considerably in their academic skill background and in the amount of time they have been away from formal education. What is important is their motivation to learn and their willingness to make up for any skill deficits in the early part of their program. Even adults with academic potential are not all ready to succeed at college-level learning without some explicit instruction and support activities which enable them to become accomplished participants in the learning process.

2. Adults have frequently been exposed to a wide array of disciplines and topics, though not necessarily through formal education. They need less mandatory exposure and more consolidation of the knowledge and perceptions they have acquired. For adults, the connectedness of what they have learned (prior learning) and what they are learning in courses and other learning experiences (new learning) needs to be demonstrated. This may be particularly true when the prior learning has been colored by unexamined biases and, therefore, needs to be re-examined.

3. Adults often are drawn to study a discipline because they have an immediate need for the information they think they will learn. Introduction to Psychology is more likely to be taken because the adult wants to learn how to deal with a difficult teenager, an aging parent or an aggressive co-worker than because of a desire to understand the structure and methodology of the discipline. Introductory courses, while not overlooking the necessity to introduce students to the discipline, should allow students to raise real-life questions and work on solutions to problems.

4. Adults, and perhaps younger students, too, may benefit from broad general courses after having taken some more specifically focused courses. This may be true for a general education course on evolution but also for courses in a concentration in management where students begin to generalize about management functions after having taken courses in accounting, personnel, and marketing.

5. Cognitive development, particularly at the level of competent analysis, synthesis, and evaluation, requires explicit attention in the curriculum. For many students the key to learning higher level cognitive tasks is in seeing these functions modelled and critiqued, both by instructors and fellow students, and in attempting progressively more complex approximations themselves.

No claim is made that these assumptions are the only ones that stand out about adult higher education. We do claim, however, that these are assumptions which can have a decided impact on how adult students experience college.

This brief analysis of both curriculum structure and requirements and educational assumptions can also provide a possible framework for rethinking how curriculum can become more responsive to the learning needs of adults. We believe that some considered additions and deletions to existing curricular structures may serve the adult student quite well in most areas. However, we also believe that "packaging" of the curriculum is critical.

CONCLUDING COMMENTS

Adult Higher Education Action Agenda for Curriculum Reform and Renewal — A Modest Proposal

Four Pivotal Points

No doubt, curriculum issues in higher education are again at a point of transition. Curriculum discussions currently taking place on college and university campuses today are extensive. For many of us in adult higher education these discussions are welcomed.

Our collective responsibility as professionals in adult higher education is to widen these discussions to include the adult higher education agenda for curriculum reform and renewal. It is our contention that developing such an agenda to serve the adult student be based upon four major points:

1. It is essential to start with where the learners are. The design and structure of the curriculum should include understandable pathways that stimulate and challenge the learner's intellectual development. The structure should not be weighted by the conventional assumptions, expectations, and requirements which apply to traditional-age students. It is equally important that the institution has a better understanding of the level and kind of academic skills the adult brings to the institution. The adult should not be penalized for some possible deficiencies.

2. The programmatic responses to the adult learner require a greater individualization of degree program plans based on the integration of prior and new learning. Such individualization, however, should not be at the expense of coherent educational plans.

3. Shaping the curriculum also needs to be based on our knowledge of cognitive development and experiential learning. There is a tremendous need to design curricular structures which facilitate the learner's ability to gradually reach higher levels of cognitive processing.

4. The agenda should also include a more comprehensive array of learning modes available to satisfy diverse learning styles.

All four agenda items should lend support to a broader view that a curriculum structure for adult learners should be designed as a framework for knowing and doing. A framework which bring to life experiences and events of the past, facilitates a renewed sense of confidence for dealing with the present, and enables a discriminating view for anticipating the future.

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TOWARD HIGHER LEARNING

THE IMPORTANCE OF ASSESSING OUTCOMES

Can the value of a college education be measured and what are the most effective ways to improve the quality of the undergraduate experience? Harvard president Derek Bok answers these questions in this excerpt from his new book, Higher Learning.

In the past few years, we have heard much about the quality of education in this country. At first, the discussion was confined to the state of our primary and secondary schools. Report after report pointed with alarm to a "rising tide of mediocrity" accompanied by a twenty-year decline in college board scores and a drab record of achievement by American students in comparison with students from other advanced countries. Once these discouraging assessments started to appear on the front pages of our newspapers, it was only a matter of time before government officials and other critics would cast their eyes on higher education as well. Now, speeches and studies have begun to emerge, probing the value of a college education and questioning the standards that students are called upon to meet. Governors and other public figures are openly wondering just what results are being obtained in exchange for the billions of dollars spent on higher education.

How do we answer these critics? What do we really know about the value of a college education? In fact, the evidence we have is at once thin and disturbing.

It is thin because all too few investigators have pursued the questions of how much, and how, students learn in college, and because methods of answering these questions are inherently difficult. It is disturbing because the evidence we do have tends to suggest that colleges produce only modest results in helping students progress toward the academic goals of a liberal education. There is little cause for celebration in research findings indicating that the average senior knows only as much as students at the 84th percentile of the freshman class; it is even more disturbing to note other findings that reveal much lower rates of progress in such important activities as critical thinking and expository writing.

Of course, it is always possible that

by Derek Bok

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some or all of this literature is flawed. But the findings themselves are not implausible. The fact is that colleges work hard to provide new facilities, new activities, and new courses but devote remarkably little time to systematic efforts aimed at improving student learning.

Many educators will hotly dispute this assertion. After all, they will retort, what are deans and faculties doing when they revise the curriculum and develop new majors if not improving the quality of education? What are individual professors doing when they create new courses and labor to make old lectures better?

This reaction is understandable. But the fact remains that the time faculties and administrators spend working together on education is devoted almost entirely to considering *what* their students should study rather than *how* they can learn more effectively or *whether* they are learning as much as they should. The professors who vote for new majors or curricular reforms know very little about whether these initiatives will actually help students progress toward the educational goals of the institution. And rarely, if ever, do they make a serious effort to find out.

Within the last few years, however, interest in these topics has emerged from a new quarter. Public officials have suddenly become concerned to discover how much students are learning and what benefits result from expensive undergraduate programs. To quote Secretary of Education William Bennett: "The Department of Education has an obligation to the students it assists with financial aid, and to the taxpayers whose funds it disburses, to suggest better means by which the higher education consumer can be confident he is purchasing a sound product." As costs continue to rise, more and more legislators are echoing these sentiments by calling for some form of assessment of how far students have progressed and whether they are fit for graduation or for advancement to a higher level of education.

Education, for faculties and administrations, is almost entirely a question of what students should study, not how they can best learn.

The easiest way to satisfy such concerns is to require students to take a standardized test at stipulated intervals in their undergraduate program. This is what several states, including Florida and Tennessee, have already done. But standardized tests have serious drawbacks. If they are easy to pass or if little turns on the outcome, neither students nor faculty will pay much attention and the exercise will be a waste of time. If the tests are hard and the results have significant consequences—determining whether students are allowed to graduate or how much money the university will receive from the legislature—the effects may actually be detrimental. Faculty and students will begin to direct their teaching and studying toward successful completion of the exams. While this will help to ensure that students achieve minimum competence, no standardized test yet devised can do justice to the many aims of undergraduate education or even provide a decent measure of its most important objectives.

Typically, such exams emphasize the acquisition of facts and the mastery of simple skills. As currently constructed, they are not suited to measuring how clearly students think about issues of social justice, how deeply they can appreciate a painting or a literary text, how much they have gained in intellectual curiosity, how far they have come in understanding their own capacities and limitations.

In the end, therefore, a heavy emphasis on uniform tests threatens to trivialize undergraduate teaching and to rob it of diversity by orienting in-

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struction too heavily toward a single imperfect means of measurement. Such a policy will not interest the faculty, let alone the abler students, and hence will not encourage a broad-based effort to enhance the quality of education.

A successful strategy of reform must enlist professors in individual institutions to work together to improve not just the curriculum but the process of learning as well. Such efforts are distressingly rare. In one small corner of American higher education, however, faculties have made a remarkable attempt to formulate common goals and work collaboratively to achieve them. These colleges are not among the better known; together they make up less than one percent of all our institutions of higher learning. Still, their experiences offer the closest approximation we have to a determined, comprehensive effort to increase the effectiveness of undergraduate instruction.

All of the institutions in question have embraced a concept called competency-based learning. All of them have begun by formulating a clear definition of educational goals expressed as competencies. For example, Alverno College—a pioneer in the movement—has adopted the following aims for its students.

- Develop effective communications skills.
- Improve analytic abilities.
- Strengthen problem-solving capacities.
- Develop the ability to make value judgments.
- Improve facility in social interaction.
- Achieve understanding of the relationship between individual and environment.
- Develop awareness and understanding of the contemporary world.
- Develop understanding of and sensitivity toward the arts and a knowledge of the humanities.

Faculty members work together to determine the criteria by which to measure these competencies and to devise the means by which each may be assessed. These methods are often unusual, calling on students to perform demanding tasks rather than simply take written exams. The actual evaluation of students is usually performed by someone other than the professor teaching the class, and all students must pass in order to graduate. Thus, instructors do not give exams, let alone rank the students by awarding a standard distribution of grades; the professor tries to help all students to demonstrate the desired competency at the highest possible level.

A system of this kind can produce major shifts in the behavior and motivations of the faculty. Much effort goes into defining common objectives and discovering reliable methods to assess them. Instructors spend a great deal of time trying to figure out how to improve the performance of their students. Because performance is measured by outside assessors using external criteria, professors lose much of their autonomy and must adapt their teaching to satisfy goals other than their own. Their success in doing so is made visible with each new round of assessments, so that those who fall short are constantly motivated to review their efforts and to find better ways of helping their students learn.

One can predict that faculty members in a research-oriented university will strongly oppose such a system. They will shrink from the prospect of endless discussions of aims and assessments and recoil from the thought of having to adapt their courses and teaching methods to serve criteria and goals determined by others. Most professors are working hard preparing new generations of scientists and scholars and trying to make important contributions to knowledge in addition to teaching undergraduates.

Competency-based learning is not designed for busy people with multiple tasks. It is—at least in the initial years—an all-consuming enterprise.

Thoughtful faculty members will also wonder whether any system aimed at a single set of goals can hope to capture all the values of a liberal education. Most professors have subtle purposes and interests of their own that will rarely be included in a list of shared objectives. These individual contributions give life and texture to education and often leave a more lasting impression than any planned, collective effort can succeed in doing. In a program of competency-based learning, however, it will be difficult to keep these personal elements from being submerged beneath the overriding preoccupation with achieving common institutional aims.

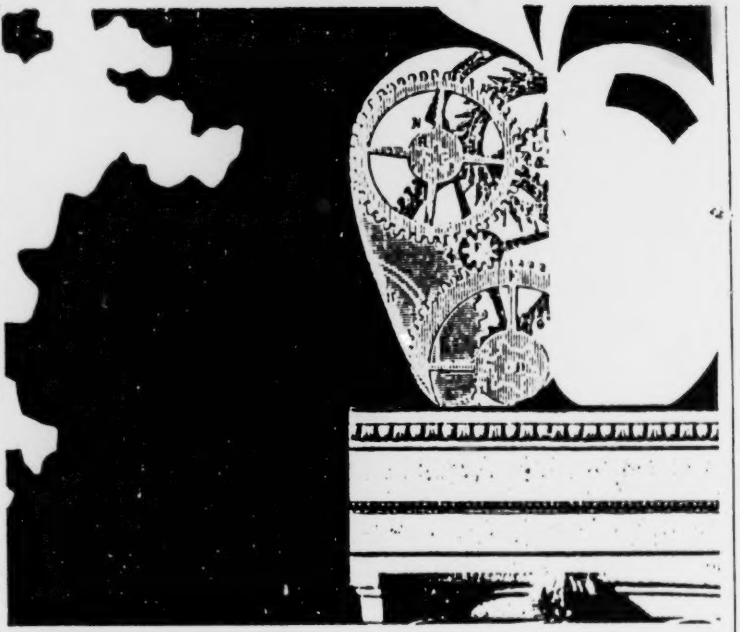
In addition, even the most familiar, basic goals often elude measurement by existing methods. How is one to trace the effects of college in developing lifelong intellectual and aesthetic interests? What group of competent philosophers would agree on methods for measuring moral development? These problems afflict every attempt to assess the value of education by a common set of objectives. Such efforts have the virtue of focusing faculty attention on the task of defining common aims and determining how much progress students are making toward these objectives. The danger is that they will concentrate faculty attention on a few measurable goals to the neglect of other purposes too intangible to assess by known methods of evaluation.

A closely related objection to competency-based learning has to do with the way in which one conceives the value of knowledge. Is the study of philosophy or cultural anthropology simply a means to some collective goal, a mere vehicle for achieving a heightened capacity for critical thinking or a greater understanding of the individual's relation to the environment? Or is there a value simply in knowing about philosophy or anthropology for its own intrinsic worth—as an end rather than a means?

Most faculty members believe passionately in knowledge for its own sake. This belief may strike some people as effete. But it accounts for much of the enthusiasm professors feel toward their disciplines, for many of the books that have attracted lasting attention, and for most of the basic scientific discoveries that have eventually led to useful applications. In stressing the acquisition of basic skills, therefore, competency-based learning can easily come into conflict with the deepest feelings professors have toward their subjects.

These objections seem weighty enough to dim the prospects of competency-based education as a model for most universities. Yet the status quo is not satisfactory either. By failing to articulate the shared objectives of a liberal education or to discuss how they are related to individual courses in the curriculum, faculties can easily lose sight of their common purposes. In such an atmosphere, important aims acknowledged by all, such as the ability to communicate precisely or to reason carefully, remain the responsibility of no one. Faculty members, intent upon their private purposes, may teach in ways that do little to help their students make progress toward these basic goals.

In sum, it is inappropriate and unrealistic to expect professors to subordinate everything to helping students achieve a set of shared objectives. But it is equally wrong for faculties to pay no attention to common goals and to ignore the question of how well these aims are being realized. What we need is a middle way that avoids both of these extremes.



Agreement on objectives is not enough: goals must be deliberately connected to the teaching of individual courses.

How might such a program look? A logical first step would be to define a set of shared objectives toward which to orient teaching and learning throughout the four undergraduate years. Fortunately, it is probably not impossible to formulate a number of goals that will command wide agreement in the faculty, so long as no one insists that they be exclusive. Most professors, for example, would agree on such common aims as critical thinking, clarity and style in communication, and acquaintance with important fields of knowledge and modes of thought.

Agreement on objectives, though indispensable, is not enough; the goals must be connected in some deliberate way to the teaching of individual courses. To achieve this, several steps seem especially important. Colleges must communicate the goals to students and explain their importance. Members of departments or instructional programs need to come together and discuss ways of adapting their teaching and assignments to make sure that the shared purposes are not forgotten amid the private aims and interests of individual professors. Faculty members should cooperate to devise ways of crafting examinations to reinforce their common aims, since exams have such a strong influence on the ways students study in their courses. Finally, faculty members should give students prompt and ample feedback on their papers and exams in order to help them understand what constitutes superior performance and where their own strengths and weaknesses lie.

Although these steps seem obvious, they are rarely achieved in research universities. One can examine the catalogs and brochures of many institutions and never find a detailed description of the common goals of undergraduate education. Professors seldom meet at any length to discuss how to adapt their teaching to achieve shared objectives. The crafting of exams is almost never a topic of serious discussion; instead, faculty members typically draft their questions almost instinctively, using as models the tests they have observed over the years. Feedback on papers and exams also leaves much to be desired. In university colleges, much of the grading is left to graduate students, and comments are often perfunctory or nonexistent.

What accounts for these practices? Perhaps the answer lies in the attitudes with which faculty members approach their work. Professors are among the most independent of all professionals and guard their autonomy closely. While they are happy to discuss what courses should be required, they are suspicious of initiatives that could limit their freedom to decide how to teach or to evaluate their students.

Such attitudes help us to understand why it would not be feasible to *prescribe* collective goals or teaching methods. They do not explain why there is so little *discussion* of ways to improve the educational process. Experience, even in the most independent research faculties, suggests that deliberations of this kind are not impossible. For example, in considering its core curriculum, the Harvard faculty adopted rather precise goals and criteria for each category of required courses and established a standing committee to ensure that all such offerings would satisfy the agreed-on standards. Compared with these measures, voluntary discussions of common goals and methods of achieving them can hardly seem terribly threatening.

Another hypothesis is that faculty members in research universities are simply too busy and too committed to their scholarly pursuits to spare the time to come together to consider how to make their teaching more effective. This is the favorite explanation of most writers who criticize educational practices in universities. Yet the criticism is usually overdrawn. There is an implication that professors are selfish and intent only on enhancing their scholarly reputations, with little acknowledgment of the intense effort required to serve simultaneously as undergraduate teachers, mentors of graduate students, and scholars seeking to enlarge knowledge and understanding. In stressing the virtues of effective pedagogy, moreover, critics often fail to recognize the immense importance of research, not just in contributing to the general store of knowledge but in helping to sustain the vitality of professors by ensuring that they continue to have something of genuine importance to teach.

No one can deny that research and graduate training do limit the time available to improve the quality of undergraduate education. Even so, the effort required to discuss educational goals or to consider better ways of pursuing them through teaching and examining is hardly so great as to rule out the enterprise entirely. The work involved is a tiny fraction of what professors already devote to teaching. It could be accomplished several times over in the hours saved from faculty meetings on much less important topics.

The problem of feedback is more complex. Unlike the other steps just described, careful evaluation of students' work can be very time-consuming and hence could interfere significantly with research and other important tasks. Still, there are ways to reduce the time involved. Graduate students can be trained to give detailed, helpful comments on papers and exams. Professors can distribute model answers or prepare written analyses of each question discussing the ingredients of a competent answer and explaining why each element is important. Computers will vastly increase the possibilities for immediate feedback. Even these initiatives may take somewhat more time than faculty members normally give to the examining process. Nevertheless, the extra burden need not be great, and there are few efforts professors can make that are more likely to enhance the progress of their students. Unless undergraduates can learn where they have not done well and why, they are unlikely to discover how to do better.

An Assessment Seminar

At Derek Bok's Suggestion, Prof. Richard Light has convened a "Harvard Seminar on Assessment," built around three-hour dinner meetings held once a month through the academic year.

By October, forty-seven University faculty and administrators, joined by twenty visitors from sister New England colleges, had signed on for this "seminar." Each meeting opens with a research presentation and will then break into special interest groups.

Light, who holds a joint appointment in the Kennedy School of Government and the Graduate School of Education, is a well-known expert in program evaluation. The seminar's working groups reflect a view of assessment oriented toward evaluation (of writing, programs, instruction, student growth, etc.).

Costs of the seminar are met by Harvard and through a small grant from the Fund for the Improvement of Postsecondary Education. A conference to report preliminary findings is contemplated for next fall.

—Ted Marchese

In sum, none of the obvious explanations gives an adequate reason for failing to make a collaborative effort to improve the quality of education. At best, the prevailing theories suggest why such efforts will not occur spontaneously. They do not rule out a successful attempt by a resourceful dean or department chairman to get the necessary discussions under way. The question, then, is not why such initiatives must fail but why they have been tried so rarely.

Beyond making these efforts, it is also important to devise ways of estimating their success. At present, universities have no adequate way of measuring the effects of undergraduate education or assessing the methods of instruction they employ. This is a serious defect. No human endeavor can progress, except by chance, without some way of evaluating its per-

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Assertions that education is up to students or learning is too complex for quantification are often self-serving and in large part wrong.

formance. Only with assessment of this kind can faculties proceed by an intelligent process of trial and error to improve their educational programs.

Attempts to examine the quality of education are hardly unknown. Psychologists have already produced an extensive literature on the subject. Many studies try to measure the progress students make toward familiar educational goals. Investigators have probed such interesting topics as the impact on learning of small classes and the effects of computer-assisted instruction and other new methods of teaching.

The critical point, however, is that such inquiries rarely come about at the behest of curriculum committees or academic deans. The investigators are typically psychologists or professors of education who work for their own professional purposes; they rarely have close contact with campus officials who might profit from their studies. Without a connection between investigators and decisionmakers, such research lacks prestige, and much of it has no practical value for those who actually help to shape educational policies. Again and again, surveys and tests measure attitudes and changes that bear no relationship to any reforms that faculty members or administrators could conceivably make. Most of the studies examine public school classes, and even those that focus on colleges are often of limited usefulness because they look at institutions too different from one's own for their results to have any practical utility.

What explains the failure to carry on an effective evaluation of undergraduate education? The most likely answer is that such research can seem so threatening. It may question teaching methods that professors have used for many years and thus discredit countless classes that can never be reclaimed and done over. It may signal a need for new techniques of instruction or new types of courses that will require long hours of effort. Since faculty members do not place great faith in the reliability of such research, they fear that they may be asked to spend much time introducing reforms based on studies that later turn out to be worthless. Worst of all, investigators may simply cast doubt on the value of undergraduate teaching without finding a remedy, thus calling the entire enterprise into question.

The result is a kind of vicious circle. Apprehensive about educational research and skeptical of its validity, faculties give the work such a low priority and status that their skepticism becomes self-fulfilling. To break this cycle, someone will have to take the initiative to bring educators and investigators together in a common effort to investigate questions of genuine importance to the development of educational policy in our colleges.

The most basic need is to develop serviceable methods for measuring students' progress toward common educational goals. Granted, such methods must be used with caution to avoid any risk of pushing faculty members to concentrate on what is measurable at the expense of more intangible goals. Properly used, however, adequate measures could serve to compare the effectiveness of different methods of teaching, varying class sizes, or different undergraduate majors. Such measures could also help in identifying groups of students whose progress was especially rapid or especially slow, so that investigators could seek explanations for these differences. Eventually, nourished by more basic research in human cognition, faculties might come to understand how particular teaching methods work differently for different groups of students and why some students have more difficulty than others in developing intellectually.

If studies of this kind were encouraged, would it be realistic to expect useful findings? Not in every case. I have already mentioned the difficulty of finding serviceable methods for measuring students' progress. Even

when this obstacle can be overcome, it is often harder than one might think to arrive at conclusions that will inform educational policymaking.

For example, consider the attempt to decide whether small classes are more conducive to learning than large classes. One might suppose that clear differences would emerge from comparisons of the performance of students in courses of various sizes. But it turns out that class size affects different students in different ways, that much depends on the type of material being taught, and that even more turns on the methods of instruction used. Sorting out these variables to arrive at useful results is no easy matter.

These difficulties do not mean that we must abandon all hope of useful results for the indefinite future. Some issues are easier to explore than others. Moreover, it is not necessary to achieve results with the accuracy required by scientific journals. It is helpful simply to arrive at conclusions plausible enough to support academic reforms. By this test, there are certainly ways of making useful assessments, even in the short run, that will give us findings more reliable than the intuitions and impressions that sway most educational debates at faculty meetings.

An example or two may make the point more clearly. At Harvard, freshmen and seniors were asked to write a short essay, and their papers were compared. A careful reading disclosed that although seniors in general seemed to have improved the quality of their writing, many science majors had actually regressed. Further inquiry suggested a persuasive explanation for this result. In most science courses, students had good reason to consider it a waste of valuable time to write complete sentences. The important thing was to state the correct formula or phrase to solve the problem and to write it as quickly as possible. Apparently, four years in such a system undermined the quality of a student's writing. Of course, this finding was hardly airtight. The assessments of student writing were admittedly subjective, and the hypothesis may not have been proven according to strict research criteria. But the conclusion seemed plausible enough to convince faculty members to change the written assignments given to science majors.

In another study at Harvard, undergraduates who took the huge introductory economics course were tested a year later to discover what they remembered. The tests showed that students had forgotten most of the terms and nomenclature but still understood the concepts and methods of analysis. Students also reported that they spent little time applying what they had learned by reading articles about economic issues in newspapers and magazines. On the basis of these results, course materials were revised to emphasize concepts and to weed out less important items of nomenclature and terminology. At the same time, instructors converted their problems and illustrations from the traditional abstract variety to contemporary questions that might enhance the students' interest in current economic issues. Once again, findings that lacked scientific rigor were persuasive enough to produce changes in teaching methods.

It is easy to dismiss efforts to improve the process of learning by asserting that education is something that students must obtain for themselves or by insisting that learning is too complex to permit systematic inquiry. Such claims are often self-serving and are almost certainly incorrect, at least in large part. We already understand enough about some elements of the learning process to identify basic steps that can improve education. Other aspects seem susceptible enough to study that serious investigation might bring useful results relatively quickly. Still others may be sufficiently complex to resist examination for years to come. Yet even these topics are probably no more difficult than many subjects to which professors devote entire lifetimes of scholarly inquiry.

It is irresponsible not to pay the same serious attention to issues that lie so close to the core of the university's mission. However long it takes, an institution devoted to education must do its best to study the learning process and to assess the effects of its programs. Without such critical self-examination, no human endeavor can possibly make sustained progress.

The effort we invest in this endeavor will ultimately depend on the faith we put in the value of education. Progress will not be rapid under the best of circumstances; its fruits may not be evident for a long time to come. Still, the stakes for our society in improving the quality of education make it imperative to try.

Rather than hesitate, therefore, universities should do their best to capitalize on the opportunities before them, emboldened by the story President Kennedy used to tell about the French Marshal Louis Lyautey. When the Marshal announced that he wished to plant a tree, his gardener responded that the tree would not reach full growth for more than a hundred years. "In that case," Lyautey replied, "we have no time to lose. We must start to plant this afternoon." ☐

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Module 7

Instructional Delivery Options for the Adult Learner

–The Need for Multiple Instructional Delivery Modes
–A Menu of Distance Education Options
– Characteristics of Distance Learning Modes
– Pitfalls of Distance Education
–References
–Reprints

Instructional Delivery Options for the Adult Learner

Preview

For adults, the ideal learning environment is one that encourages mutual trust and respect among teachers and students, and facilitates dialogue. But how does one provide this kind of environment, while eliminating the barriers of time and space that preclude many adults from participating in higher education? In this module, you will explore some of the new educational technologies which can bridge these barriers and facilitate student-teacher interaction at a distance.

Goals

In this module, you are invited to:

- Explore the differences between the off-campus learner and the campus-based learner, and the implications of these differences for distance teaching
- Identify the types of alternative instructional delivery modes in your own institution
- Evaluate the effectiveness of these alternatives in terms of generating participation and facilitating learning
- Assess the impact of these alternatives on the roles of the student and the instructor

The Need for Multiple Instructional Delivery Modes

Key Issues

Research suggests that adult learners are exercising increasing independence in choosing the means through which they achieve their educational goals. This is no surprise in that changing lifestyles, economic circumstances, and employment trends have created an environment which precludes many from attending traditional educational programs. For these individuals, distance learning options may hold the key to participation in formal education options that liberate the adult learner from the constraints of schedule and/or location associated with the traditional classroom.

One of the most familiar examples of distance education is the off-campus extension course. In this non-technological approach, the instructor arranges to teach at a remote site, often concentrating instruction in fewer but longer classroom sessions. Such outreach programs are frequently implemented in areas where students are geographically dispersed.

Article

The following article by Johnson discusses some of the important issues related to outreach teaching and distance education in general. Her study provides some interesting insights into the motivations of students and faculty that participate in this kind of off-campus instruction. Read the article, reprinted at the end of the module. Then return to this page and answer the questions that follow.

Johnson, S. E. (November, 1985). Faculty perpectives on outreach teaching. *Lifelong learning.*

Questions

What was the major difference noted between off-campus and on-campus students? What were some of the other differences?

Question What were some of the common motivations that led students to enroll in an off-campus course?

Question What were some of the motivations that led faculty to teach off-campus?

Questions Have you ever been involved with similar outreach programs? Do the motivations of students and faculty described in Johnson's study reflect your own experience with distance learners?

A Menu of Distance Education Options

Key Issues

Remote site instruction represents only one of several distance education options available to the adult learner. Additional options made possible by current publishing, electronic and, telecommunications technologies are listed below.

- Texts with study guides
- Self-instructional workbooks
- Audiotapes with or without study guides
- Portable multimedia packages
- Home study kits
- Prepackaged telecourses via cable or satellite
- Instructional Television Fixed Service (ITFS)
- Slow scan video and audio
- Teleconferencing
- One-way and interactive radio
- Telephone
- Conventional mail
- Bulletin boards and electronic mail
- Computer-based and managed instruction
- Teletext and videotext
- Interactive videodisc
- Hypermedia, including CD-ROM and CD-I
- Learning resource centers

These distance education delivery modes vary considerably in terms of the degree and type of interacting each provides. A useful framework for exploring this diversity has been developed by Kathleen Scales of the Open Learning Institute in British Columbia (1983). This typology is illustrated on the following page. Note the varying degrees of institutional support and self-sufficiency associated with each type of distance learning.

FIGURE 7-1: A TYPOLOGY OF DISTANCE EDUCATION

Increasing Provision of Support	Increasing Need for Self-sufficiency

Type I: Instruction is delivered through any one or a combination of one-way, non-interactive media (e.g., print, audio, or video)

Type II: Provision is made for delayed two-way communication between learner and instructional agent (e.g., interaction through mail)

Type III: Provision is made for coincident two-way communication between learner and instructional agent (e.g., interaction through telephone dialogue or with a computer)

Type IV: Provision is made to permit remote group interaction among learner, agent and others (e.g., through teleconferencing or live-interactive video)

Type V: Provision is made for occasional face-to-face interaction (e.g., seminars or clinical experiences)

Type VI: Fully supported instruction is supplied at a location nearer the learner than the "mother agency" (e.g., an extension program, a lecture series provided in a distant community, or a satellite campus)

Scales, K. (1983, November). A typology applied to distance education in British Columbia. *Lifelong Learning*.

Article

The following article provides an overview of the most promising distance learning technologies currently available, as well as the critical issues that determine their effectiveness in reaching adult learners. Read the article, then return to this page to answer the questions that follow.

Moore, M. G. (1987, September). University distance education of adults. *Techtrends*, pp. 13-18.

Question

Which of the distance learning technologies described are available in your institution?

Questions

What has been the experience of faculty and students using these technologies? Which approaches have proven to be most effective?

Question

What is your attitude toward the use of distance learning technologies? What is your experience with them?

Questions

Do distance learning technologies, in general, enhance or limit the learning opportunities for adult learners? How do they affect the quality of learning?

Questions

How do distance learning technologies affect the role of the instructor? How do they affect the role of the student?

Characteristics of Distance Learning Modes

Key Issues

Each mode of distance instruction has its own unique advantages and limitations. The unique features of four modes in particular are presented in summary form on the following pages. When facilities are available, a varied approach is recommended to provide a certain degree of redundancy, to accommodate individual learning styles, and to make the course more interesting to students.

Institutions have begun to realize the importance of providing multiple options to meet the diverse needs of students. While these institutions in general are turning from broadcast media to less expensive and less complex prerecorded materials, they continue to expand the menu of choices available to the adult student learning at a distance.

TABLE 7-1: CHARACTERISTICS OF PRINT MEDIA

MEDIA	Print
TYPES OF MATERIAL	Specially written correspondence texts or lessons Text books and readers: specially written or already published Supplementary items: notes on broadcasts, assignments, instructions, drawings, photographs, maps, charts Journals, newspapers, periodicals Reading guides, bibliographies
PEDAGOGICAL FUNCTIONS	To impart facts To develop skills To illustrate how knowledge can be organised for learning To provide links to tutors/other students
MOTIVATIONAL FUNCTIONS	Student can work at own pace Self-assessment questions can provide reinforcement Provides a permanent record for revision Academically respectable Written comments from tutors provide reinforcement
DEMANDS ON STUDENTS	Fairly high levels of literacy required Motivation for and/or previous experience of independent learning from reading needed Tends to impose a linear learning strategy
FLEXIBILITY AND COSTS	Generally the least expensive and most flexible of the media Must be prepared well in advance of use by students Major updating and revision can be costly, but brief supplementary items (notes, errata,etc.) can be prepared quickly in response to student/tutor feedback
CREATION, PRODUCTION AND DISTRIBUTION	Special skills required for preparation of self-instructional written material (implications for staff traning, use of consultants) Technical production skills needed: editing, design, illustration, printing, storage Distribution arrangements; post, bulk deliveries to local centres, road/rail, air transport

TABLE 7-2: CHARACTERISTICS OF AUDIO-VISUAL MEDIA

MEDIA	Audio-Visual
TYPES OF MATERIAL	Slides, filmstrips, film loops, film, videotape Audio-tape and/or discs + slides, pictures, diagrams Radio broadcasts TV broadcasts
PEDAGOGICAL FUNCTIONS (examples)	Audio (eg. radio, audio-cassettes) - to convey primary source material (drama, music...) - to teach language skills - to provide information rapidly (radio broadcasts) - to provide supplementary 'tutorials' on areas of difficulty Audio-visual (eg. film, TV, tape-slide) - to demonstrate experiments - to convey primary source material (eg. human or animal behaviour, drama, case-studies, documentaries) - to illustrate working components (eg. of machinery) - to illustrate principles involving dynamic change (use of animation, slow motion...)
MOTIVATIONAL FUNCTIONS (examples)	Publicity and student recruitment (broadcasts) To give feeling of identity with staff, and other students (broadcasts) To act as a stimulus for group work via viewing or listening groups (broadcasts, films, tape-slide) To complement print materials and stimulate students' interest To help pace students' learning (fixed broadcast times) To allow student to control and rehearse his learning (audio-tape)
DEMANDS ON STUDENTS	Fixed broadcast times and/or viewing and listening group times can be inconvenient for students Transient nature of broadcasts means students need adequate preparatory and follow-up guidance if broadcasts are to be integrated with other materials
FLEXIBILITY AND COSTS	Open channel broadcasting schedules impose strong constraints on student study patterns and on delivery of associated non-broadcast materials to students Access to transmission frequencies and appropriate air time for broadcasts can be a problem Production costs are lower for radio than for TV Non-broadcast audio-visual materials can be very costly to provide to each student

TABLE 7-3: CHARACTERISTICS OF PRACTICAL ACTIVITIES

MEDIA	Practical Activities
EXAMPLES	Use of home science kits Directed work in local laboratories Research activities and/or field-work in students' locality (eg. social surveys, collection of geological specimens) Use of computing facilities (self-assessment, information retrieval, data analysis)
PEDAGOGICAL FUNCTIONS	Application of techniques, skills and concepts learned through other media to 'real' situations Learning of specific skills (eg. manipulative skills) essential for certain Science/Technology curricula
MOTIVATIONAL FUNCTIONS	Opportunity to interact with future working environment (eg. learning of behavioural and manipulative skills which are essential for a particular job) Opportunity to work in a group or team framework in carrying out practical work With home experiment kits opportunity to work at own pace
DEMANDS ON STUDENTS	Use of equipment, for cost reasons, may imply using a local centre and working in groups: reduces flexibility for student in study time planning Use of home kits may involve complex preparation, cooperation of others, access to water and power supplies, and an undisturbed room for study
FLEXIBILITY COSTS	A significant proportion of practical activities in the curriculum will reduce flexibility for student time planning Practical activities need to be carefully integrated with the other available media to be of optimal value: implications for organization of student's activities and for course creation and production activities Laboratory activities will require tutorial supervision of some sort, and use of (costly) equipment
PRODUCTION AND DISTRIBUTION	Need to investigate locally available facilities (laboratories, other universities, colleges, schools, government and private organizations) which can be used for help in production of materials and instruments, running of practicals (eg. laboratory) classes, access to resource, people and materials Need for production, distribution, storage and maintenance facilities for any equipment used by students either individually in their own homes or in local centres

TABLE 7-4: CHARACTERISTICS OF INTERPERSONAL ACTIVITIES

MEDIA	Interpersonal Activities
VARIETIES	Remote - correspondence tuition and assessment of students' work by tutors - tutor-student telephone communication - student to student communication by writing and telephone Direct - local tutorial classes, seminars, lectures by tutors - contacts with local people with relevant knowledge/skills - attendance at short residential courses - student self-help and discussion groups - counselling sessions (course choice, vocational guidance)
PEDAGOGICAL FUNCTIONS	To grade students' assignments (correspondence teaching) To comment on the content and organization of assignments (correspondence teaching) To interpret course material to students (face-to-face teaching) To provide remedial help (face-to-face teaching) To provide guidance on study methods (counselling) To allow different perspectives to bear on the course (study group activities) To discuss and explain course materials with others (student self-help groups)
MOTIVATIONAL FUNCTIONS	To personalize the distance teaching system To consider individual response to course material To pace students' work To gain feedback on attainment via grading of assignments To provide local supportive agencies to help with learning difficulties, personal circumstances affecting study, job implications To provide a supportive group identity vis-à-vis the central system (self-help groups)
DEMANDS ON STUDENTS	Submission of regular assignments to correspondence tutors makes heavy demands on students' time Provision of tutorial, counselling and study group activities involves student in travelling (cost inconvenience) Provision of fixed tutorials reduces flexibility for student in study time planning
FLEXIBILITY AND COSTS	Provision of local tuition and counselling will raise unit costs Low course enrolments will necessitate wide tutorial catchment area and reduce flexibility of local tutorial provision Alternatives to face-to-face teaching (eg. telephone tutorials) have resource implications Tutorial, counselling and study group activities need to be carefully integrated into the other available media to be of optimal value: implications for organization of students' activities and for course creation and production activities
ORGANISATION AND RESOURCES	Need to investigate the availability on a local basis of tutorial and counselling personnel (staff from other universities, colleges, schools, other institutions and agencies) Need to brief, train and monitor part-time staff Need to hire tutorial accommodation Need for a regional office to organize and co-ordinate local support services for students Need to devise systems for the flow of assignments between students, tutors and the university Need to make special provisions for disadvantaged and/or disabled students Need to decide on balance between central and regional involvement in student-based activities

Kaye, A., and Rumble, G. (1981). *Distance teaching for higher and adult education*. London: Croon Helm. Reprinted with permission.

Pitfalls of Distance Education

Key Issues

Although it may be a practical necessity in many cases, distance learning is not without its critics. One of the concerns often cited is the degree of self-direction it demands of the student. While such self-direction may be a critical developmental goal, the approach may be uncomfortable for many adults. The challenge lies in providing delivery modes that encourage self-direction without eliminating those interactions that support learning and motivation.

Another criticism expressed by Grossman (1987), has to do with the overreliance on externally produced courses and/or materials in distance learning programs. Citing telecourses as a familiar example, he argues that the use of such materials often separates instructional development from dissemination and restricts the faculty role to that of resource manager. Other pitfalls to be aware of include:

- The loss of the creative and dynamic element inherent in the instructional process
- The potential homogenization of instruction, with the concomitant loss of diversity in course offerings
- The dilution of course content to insure long shelf life and resalability of materials
- The loss of faculty control with respect to curriculum
- The loss of institutional control over instructional product

The alternative to using pre-packaged courseware is to involve the faculty in the development of materials for their own distance learning programs. Unfortunately, such efforts are usually prohibitively expensive, both in terms of faculty time and production costs.

For institutions that offer alternative instructional delivery options such as those described in this module, it is important to provide services that support the social aspect of the learning experience. Too often, distance education programs are implemented that encourage learning in isolation, dehumanizing the educational process. Students who are less self-sufficient may be particularly concerned about the administration of the course, i.e., examinations and deadlines. Such students require a strong orientation and ongoing advisory program to help them navigate through the program.

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By Sharon Ervin Johnson

Faculty perspectives on outreach teaching

College teaching provides a variety of opportunities that challenge and motivate a faculty member. Teaching off-campus, as part of the outreach program of the university, is one of these opportunities. Teaching off-campus means working with students of different ages who may have different motives for learning than students on the campus. The Division of Continuing Education, which administers outreach programs at the University of North Dakota (UND), interviewed faculty members to gain their perspectives on off-campus teaching.

Purpose

Treadway (1984) notes that off-campus instruction is often seen as public service by colleges and universities. One of the mission statements of the University of North Dakota includes providing "lifetime learning opportunities to citizens generally and to satisfy the growing desire for intellectual and cultural development." In order for the University to provide experiences that fit the needs of lifelong learners, it is important that faculty be familiar with student needs, the ways in which they learn, and successful ways of working with them. In addition, courses must be provided across a sparsely populated, agricultural state. The purpose of this study was to gather faculty perceptions of the adult learners in their classes, to explore teaching strategies and methods used by outreach faculty, and to examine faculty motivations for teaching in an off-campus setting.

Procedure

Twenty-four faculty members who taught both graduate and undergraduate credit outreach courses during 1981-82 were interviewed for approximately 30 minutes. Only faculty who chose to teach off-campus courses over and above their assigned on-campus courses were used in the sample. The faculty members interviewed taught a total of 60 courses, or one-third of the total outreach courses for the school year 1981-82. The majority of courses were aimed at educators and were taught by faculty from several departments. Fourteen of these instructors were UND faculty, eleven were from the Center for Teaching and Learning, two from Business and Vocational Education, and one was an administrator. Four instructors were from other institutions of higher education, three were from the Department of Public Instruction, and three were educators in the public school systems.

Each instructor responded to the following five questions:

1. How is off-campus teaching different from on-campus teaching?
2. What are the characteristics of adults? Do they behave and learn differently from traditional 18-21 year old students?
3. What methods and strategies have you found to be successful in teaching adults?
4. What motivates adults to enroll in an outreach course?
5. Why do you choose to teach outreach courses?

Extensive notes were taken during the interview. The notes were then categorized and responses in a specific category were ranked and summarized.

Findings

How is off-campus teaching different from on-campus teaching?

Faculty members' responses to this question fell into three categories: (a) differences between off-campus and on-campus students, (b) differences in logistics setting, and (c) differences in instructor behavior.

Student differences. The difference most frequently cited was in the motivation of off-campus students. Instructor responses suggest that motivation in this context refers to eagerness to learn, and a willingness to take the course seriously.

Lenz (1982) notes that mandated education for teachers means a variety of motivational levels in courses. Faculty in this study are in agreement. One group of instructors observed that adult students in extension courses are more eager to learn, more committed and willing to work hard in their courses than on-campus students. Such students are perceived as dedicated professionals who seek opportunities to become better teachers. Another group of faculty, however, believe that students off-campus are less willing to work outside of class. One instructor mentioned that off-campus students try to keep the course from being "too demanding" in out-of-class requirements such as term papers and reading assignments. It was suggested that students may feel insecure in their own abilities to write, think, and communicate. Other faculty members describe on-campus students as having the "mind-set of a student." They expect to be reading, studying, and writing for each class. Off-campus adults do not have this same attitude toward coursework, perhaps because of a desire to meet immediate work-related needs.

"That is the real world out there" sums up another difference. Off-campus students tend to place a higher priority on the practical aspects of learning. As several instructors pointed

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out, these students want to know, "How does this new knowledge fit into the puzzle"? "How does it fit into MY situation in MY classroom"? They want to go back to the laboratory (their classroom or workplace) and test their ideas immediately. One instructor commented that while on-campus students will do an assignment with little questioning, off-campus students are reluctant to do it unless it is relevant to their needs. This emphasis on immediate needs was mentioned by 20 percent of the instructors.

The professional experience of off-campus students is another difference noted between off-campus and on-campus students. When teaching off-campus, instructors capitalize on this experience base by using it as a frame of reference for new knowledge or skills and can tailor examples to fit their students' experiences. One instructor observed that greater preparation and class discussion is required because of this broad background of off-campus students. Another pointed out that previous experience of students can be a problem if faculty members are not able to "get out of their everyday mode" of working with younger, less experienced on-campus students.

Most off-campus students work full-time. They have already completed a full day's work, along with other commitments. This, as well as family obligations, competes with time available for professional growth. Coursework may not be these students' highest priority. On the other hand, some instructors noted that off-campus students bring renewed energy and excitement to class because of immediate relevancy to their own work. In addition, their energies go into one course at a time, while on-campus students must divide their time and energy among several courses.

Setting and logistics. Off-campus teaching involves different settings and logistics from teaching on-campus. Classroom facilities, instructional materials and strategies vary considerably, according to instructors. Extension courses are often organized at sites far removed from the university campus, sometimes involving difficult travel distances and unfamiliar turf. When teaching off-campus the instructor needs to pay closer attention to amenities such as room arrangement, light sources, and available refreshments than when teaching in the familiar setting of the campus.

Cross (1981) notes the need to schedule activities around the schedules of students. One popular format, the workshop, addresses students' desires for intensive, short term coursework. Since this format requires a large block of time, teaching five or more hours in one day is not unusual for off-campus settings. Experienced off-campus teachers point out that those accustomed to teaching traditional 18 to 22 year-olds in a campus setting usually have to develop new techniques for off-campus teaching. Resources, such as professional journals, may be lacking while access to library, bookstore, and duplicating services may be limited or nonexistent. Because adequate resources may not be available, faculty must carry the classroom with them, bringing materials from their own personal libraries, duplicating handouts or original materials created for a specific class. These preparations add to the time necessary for preparation for off-campus courses, and this need for careful, structured planning may limit some of the spontaneity possible with on-campus, residential students.

Faculty Behavior

Knowles (1980) emphasizes the importance of teacher behavior in shaping the learning climate. In off-campus settings instructor behavior may be different according to 23 of the faculty members interviewed. Most frequently mentioned was the expectation of instructor expertise as well as the expectation that students will be treated as professionals and peers. Off-campus students are often less tolerant of inadequate teaching and may "vote with their feet." Flexibility and the ability to adapt quickly to student needs was cited as important to off-campus teaching. Instructors are forced to be current, to be "on top of the field," because students' concerns about teaching are REAL and immediate: "They will tell you if you are out of date." A professor who appears unconcerned about students' needs is not rated highly by off-campus students.

What are the characteristics of off-campus adults?

Cross (1981) describes adult learners as more heterogeneous than a comparable group of 18 year olds. Their experiences are more varied and extensive and they have stronger perceptions of their goals and how to reach them. According to our faculty, adults in off-campus courses share these characteristics. Most students are employed full-time and bring a variety of experiences and backgrounds. It was suggested that off-campus students can bridge theory and application because of this experience base, hence they learn quickly if the learning is related to experiences. At the same time, because they are often from the same community, there may be greater homogeneity which creates a limited pool of shared knowledge and skills.

The practical orientation of students was noted by all faculty. Tough (1968) reports that adult learners are most frequently motivated by the pragmatic desire to use new knowledge or skills. Instructors in this study found that students bring specific needs that relate to their work and are seeking "the answer." The answer may be a theoretical framework for solving problems, a prescription for handling one aspect of their work, make-and-take materials to be used in their work, or a remedy for a perceived personal deficiency. They are seeking more information, expertise, and resource materials that will improve their own professional performance. Perhaps because they choose to be in the classroom, students are often characterized as eager to learn, and highly motivated. Some faculty used phrases such as "joy of learning," "excited," "relate easily" to describe their students' reactions to the class.

What methods and strategies are successful in teaching adults?

Successful teaching strategies involve active participation and student involvement through a variety of methods, according to off-campus teachers. Successful learning activities build on the needs and interests of learners and help students relate new knowledge of past experience (Knowles, 1980). Opportunities need to be provided for students to develop and share their own ideas, to create their own curriculum, and to evaluate their own efforts. Sharing and exchanging ideas help to cement a common bond that enhances learning.

Problem related assignments, hands-on activities, small group discussions, audiovisual materials, resource persons critique of articles and writing assignments are used to involve students in their own learning. The wide variety of methods includes lecture often in conjunction with discussion. Textbooks may be used in core courses, and some faculty members noted that texts are carefully read. Hunter (1985) emphasizes the need to tie theory and practice together in the classroom. If they are interjected into activities or experiences, students are receptive. They want to know why something occurs, why a solution works, and how they can use the theory in their own job settings. Instructors, therefore, bring theory into courses through illustration and by building problem solving situations into the content. Assignments or projects relating to the individual's own professional needs are more favored than classroom testing and long research papers. The academic and the theoretical are, thus, blended to capitalize on the field experience of educators.

Variety and active participation are important to counter the extended time of a day-long workshop format. Several instructors provide structured, theoretically oriented experiences in the morning, then add "hands-on" activities in the afternoon. Because fewer class meetings may mean fewer opportunities for instructors to anticipate difficulties, any changes or adjustments must be made "on the spot." This requires the instructor to quickly assess student needs and to re-orient the focus of the course, to "go with the bounces" in the words of one teacher.

Off-campus students, not unlike on-campus students, may be reluctant to participate because of fear of ridicule or a lack of self-confidence. This anxiety may be heightened by feelings of isolation, of being out of touch with current trends. One instructor expressed concern that educators are perceived, and perhaps perceive themselves, to be "stuck in a second rate profession." Recognizing this, an instructor needs to quickly involve students in learning by creating a relaxed and open atmosphere and encouraging student participation in discussion. Laying out goals, or providing a topical outline, as well as soliciting input from students into goal setting may increase ownership in the course. (Knowles 1980).

What motivates adults to enroll in a course?

Faculty members were asked to identify what motivates adults to participate in off-campus courses. Individual self-improvement was most frequently noted as a motivator, again emphasizing the desire to improve one's skills. Many of these students feel an obligation to improve and take pride in their growth as a professional. Intellectual stimulation and the acquisition of new knowledge as well as genuine interest, were noted as other motivations for enrolling in courses.

Encouragement by supervisors was mentioned as an added inducement for enrollment in courses. State certification and licensing, and salary advancement often depend on continuing graduate work. While grades were not seen as an important motivator, acquiring graduate credit ranked high. Lenz (1982) notes that state legislatures mandate certification for educators. Consequently continuing education which is a relatively minor part of most universities is continuing to dominate extension programs.

Particularly in sparsely populated areas, taking a course provides an opportunity to "get out of their own town and meet new people." Several instructors noted that students provide cookies and coffee for break times, thus adding to the social atmosphere of the course.

Why do you choose to teach outreach courses?

The opportunity for professional growth and renewal ranked as the most important reason for faculty members to teach off-campus. Intrinsic rewards, such as acting in a way consistent with one's values and living one's own philosophy, are a source of satisfaction in off-campus teaching. It is a chance to serve as a resource to "help people gain control of their lives" and to ultimately make a difference in students' lives. For some, teaching off-campus is part of the institutional expectation of service to the state.

A number of instructors have experience as elementary or secondary teachers and they find it both easy and rewarding to re-establish rapport and empathy with students who are currently educators in school systems. One faculty member stated, "It keeps me up on it. I know what they contend with and recognize the same problems as when I was there." One person observed that teaching educators was refreshing while another mentioned that learning is not all serious business: it is rewarding to make learning fun. Some adjunct faculty members noted that it is their only opportunity to teach, and they actively seek this experience because they enjoy teaching.

Other faculty cited the eagerness and vitality of adults as a motivator, "They're interested and that stimulates me." The idea that learning is a two-way process was reflected in the statement, "I really learn from them." Faculty members observed that their current position does not provide enough opportunity for interaction with practitioners in the field. Teaching off-campus allows them to "get out of the Ivory Tower and keep current in the Real World." One instructor remarked on the need to "get to the real people. Otherwise, I would probably get out of education." Therefore, when they teach practitioners, faculty can stay current in the discipline, gain exposure, learn from and grow with those who are in daily contact in the field.

Additional pay was mentioned as a motivator, but it was suggested by all of those interviewed that money alone would not be a sufficient motivator for teaching off-campus.

Summary

Faculty members' perceptions of off-campus students and outreach teaching in North Dakota indicate differences in expectations, methods and motivations when compared to on-campus instruction. Differences between adult and traditional aged students heightened in off-campus settings. A variety of formats and delivery systems are required in off-campus courses to utilize both student and teacher time effectively and efficiently. While using a variety of teaching strategies enhances teaching regardless of the setting, it is more critical in the field, particularly when a class extends over several hours.

Faculty who teach off-campus find both personal rewards as well as frustrations. Time commitments can be inordinate, compensation is not equal to that for on-campus teaching, and on-campus work loads are not lightened because of outreach teaching. Since both teachers and students are already employed full-time, they may suffer from lower energy levels, shortened attention spans, and insufficient time for outside reading and assignments.

Faculty do, however, continue to choose to teach off-campus. They report on the joys of working with individuals who want to learn. This appreciation of their students is a valued reward.

The need to be flexible, while maintaining high academic standards, is a challenge that off-campus teachers constantly address (Lenz, 1982). The expectation of high-quality teaching puts the responsibility for identifying, encouraging, and developing outstanding teachers on both the academic units of the University and Division of Continuing Education. Information on the characteristics of outreach students, successful off-campus instructional strategies, and the payoffs that experienced faculty members report may be helpful when introducing new off-campus instructors to teaching beyond the campus. Such information should also assist departments of continuing education to meet needs and utilize their resources wisely as they plan their outreach efforts. **AAACE**

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University Distance Education of Adults

by Michael G. Moore

In distance education the person, persons or institutions providing instruction are separate either in place or time, or both, from their learners.

Since distance learning requires a fairly high degree of self-motivation, self-direction and self-discipline, distance education is more suited to adult learners than to children. In many countries the methods of distance education are used by universities to meet the need for higher and continuing education of adults in off-campus locations.

Because of the separation between learner and teacher in distance education, the university uses print, broadcast, and telecommunications media, and correspondence instruction through the mail, so that instructors and learners can carry on the kind of dialogue that traditionally occurs in face-to-face settings.

Since dialogue is dependent on these communications media, distance educators give considerable attention to developing their media skills, whether those of writing study guides, making audio or videotapes, conducting teleconferences, presenting radio or television programs or computer programming. What distinguishes their work with these media from other users, for example advertisers, propagandists and entertainers are the demands of adult education, namely:

1. The purpose of their programs is deliberate, planned learning; and
2. It is sought by the adult learner, knowingly and voluntarily.

In educational theory, interaction has been regarded as one of two main stages of teaching. The interactive stage of face-to-face teaching is when the teacher provides verbal stimulation, gives explanations, asks questions, and gives guidance. The other stage of teaching, which is called "preactive" is when the teacher is alone, selecting objectives and planning the strategies for the interactive stage.

This two-stage theory about teaching is helpful in identifying the big difference between conven-

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tional and distance education, for in distance education it is not only the preactive stage, but the interactive too which occurs at a time and place apart from learning. In addition, in distance education the interactive stage of the educational transaction is itself often separated into two different sets of activities. In the first of these, distance educators record both content and study guidance in print or on tape or some other medium, and this is stored and later transmitted to learners. Then, at a still later time, an instructor interacts on the basis of that recorded material with particular individual learners, usually by correspondence through the mail, or increasingly, through telecommunications devices.

In distance education, because of the separation of instruction and learning, it is essential for instructors to *structure* their communications more carefully and deliberately than is necessary in face-to-face teaching. The exact extent and nature of this structuring varies according to the nature of the medium, the content to be taught, and the kinds of people learning; but constructing distance education programs is always a more elaborate, costly, and time-consuming procedure than face-to-face teaching. It requires not only experts in the content to be taught, but experts in the various media to be used, educational technologists to see the media are integrated in the most effective ways, and adult educators who will interact with the learners on the basis of the prepared materials.

History

University distance education in the form of correspondence education is more than a century old. It originated in England at the University of London in 1887 and was pioneered in the United States by William Rainey Harper, first president of the University of Chicago, when that institution was founded in 1890. At the University of Wisconsin, correspondence education began in 1896; William Lighty, appointed director there in 1906, first used the term "distance teaching."

The term "distance education" was introduced to the International Council for Correspondence Education at its quadri-annual meeting in Warrenton, Virginia in 1972, partly on the initiative of the Swedish scholar Professor Holmberg, whose familiarity with the term was derived from its use in both French (Tele-enseignment) and German (Fernunteicht) and partly by this author who presented distance as an education concept for the first time.

The acceptance of the term and the concept of distance education has been due partly to the influence of the International Council for Distance Education (renamed from the International Council for Correspondence Education), partly through its dissemination by such journals as *Distance Education* (Australia) and *Teaching at a Distance* (Great Britain) and perhaps primarily through the international impact of the ideas and practices of the British Open University.

The modern era in the practice of distance education can be dated from the establishment of the British Open University in June 1969. The Open University represented in one institution the convergence of a number of trends—social, economic and political, as well as educational and technological—not only in Great Britain but throughout the world. Some of these international trends were:

1. The struggle by a few pioneer educators for many years to provide opportunity to adults who were underprivileged because of their geographic remoteness, social position, race, sex, occupation or physical disability, and had either received no higher education or were unable to continue their education in adulthood.
2. Reaction of these pioneers to the monopoly of instruction, and, especially, of accreditation that was held by conservative educational institutions.
3. The post-war development of cybernetics, systems theory and educational technology, which gave the rationale for programmed instruction, multimedia systems, and an "industrialized" view of education.
4. The recognition within as well as outside formal educational institutions, especially in the 1960s, of the benefits of individualized learning programs, as compared with group learning, and the gradual acceptance by educational authorities of distance teaching as a means of individualization.
5. The discovery of distance education as an instrument of national development and social engineering, especially in planned economies, but in mixed economies also.
6. The discovery and exploration in the 1960s and 70s of the phenomenon of self-directed learning, and the development of resource centers, counseling networks, and other means of supporting self-directed learning.

Existing Programs

The Open University in Great Britain began teaching its first students in 1971. It now has some 70,000 undergraduate adult students, all studying at a distance to earn their degrees on a part-time basis. There are over 50,000 other adult students taking noncredit courses and courses of professional continuing education. No formal educational qualifications are required for admission to these programs. Every student is an adult part-time learner; the largest occupational groups describe themselves as homemakers (13%), teachers (12.2%), technical personnel (11.8%), and clerical and office staff (10.7%).

The Open University degree is obtained by gaining credits, with one credit being awarded on completion of a one-year course. The course is based on 32 weekly units of work, each of which requires between 12–15 hours of study. Since the degree requires achievement of six credits, most students take at least six years to earn the degree.

In the United States, distance education at the university level has been provided for many years by the independent study divisions of conventional universities. Today there are over 60 such providers. For most, correspondence remains the major medium of instruction, though many use such media as audio and videotapes and microcomputers.

In recent years, numerous other agencies, both public and for-profit, have moved into the field of distance education. While the contribution of particular institutions are noteworthy—good illustrations would be Empire State College in New York or New York Institute of Technology's Open University—there have been two developments in this area which are of special importance, and more significant than the achievements of any single institution.

First has been the stimulus given to the development of distance education programs and the improvement of distance education methods as a result of the work of the Annenberg/CPB Project. In 1981 the Annenberg School of Communications committed $150 million to the Corporation for Public Broadcasting to support projects that used telecommunication and information technologies to enhance the quality and availability of higher education. The Project provides funds to develop innovative course materials and to explore new applications of the technologies to higher education.

Among the major audiences for these resources are students who seek a baccalaureate degree but are unable to attend conventional campus classes and adult learners who do not desire college credit but wish to continue their general education. Thus, the Annenberg/CPB Project has encouraged innovative efforts to use distance teaching technologies and has focused attention of American academics on new ways of thinking about content and about ways in which it can be taught.

It is important to note that while the British Open University is funded by government to produce and teach its own courses and to award its own degrees, the Annenberg/CPB Project is only a funding agency. The courses are produced by successful applicants for the Annenberg/CPB funds. Once produced, courses may be used by institutions nationwide, and accreditation lies with the institutions that use them.

Annenberg/CPB Project courses usually feature television programs, but they also give the student one or more textbooks, a study guide, contact with a faculty member by mail or telephone, and optional or required class meetings. They are, therefore, multimedia distance education programs with many similarities to courses produced by open universities in other countries.

The second major development in recent years in the United States has been the growth of networks and consortia of institutions for delivering distance education. This is seen in particular in the International University Consortium for Telecommunication in Learning, and in the National Technological University. The former is a network of 21 colleges and universities in partnership with local television or cable stations, which aims to deliver a nationwide distance education program on a scale which would be quite beyond the resources of any of the partners acting alone. The Carnegie Corporation has awarded grants totaling over $2 million for the development of the Consortium. By 1990, some 20,000 students are expected to be enrolled through 100 colleges and universities. IUC courses consist of a study guide, set books, a suggested syllabus, student assessments, video programs and interaction between the student and members of the faculty of the member institutions. Consortium courses come primarily from two sources; they are either adapted from British Open University courses or developed by the Consortium itself.

The National Technological University is a consortium of 15 universities from the Association for Media-Based Continuing Education for Engineers, established to provide high level continuing education for technical personnel. Corporations that have contributed time and resources to launch the institution include IBM, Westinghouse, Hewitt-Packard, Digital Equipment, NCR, RCA, and Control Data Corporation.

What we are witnessing in the U.S.A. in the absence of a decision, as has been taken in other countries by a central policy-making organ to establish one or more integrated national distance education systems, is the growth of various cells of such a system, and the gradual organic growth of several systems through the networking process. The systems which are evolving have many, but not all, of the features of the more formally established distance education systems.

It is essential that the consortia movement succeed, since good distance education requires substantial investments of manpower and money, and expensive educational and communications expertise, and these can only be provided to large, specialized learner populations. These can be reached far better by universities and other institutions that act in collaboration than by acting alone, as has been the practice until now.

Course Design

The key concepts in course design are that distance education materials should be both well-structured and have "personality." Good structure is both internal and external to the written materials. Externally, it means that what contributes to the course through nonprint materials is conceived and prepared as an integral part of the course, not added on after the written course has been completed. Similarly, if television or audiotape or any other nonprint medium is to be the primary medium of instruction, what is to be taught by print, or what is to be taught face-to-face when that is possible, *must* be considered and decided in the same context as the decisions about the primary medium. Certain kinds of content and instruction are better delivered by each medium, and this must be considered from the very beginning of the course design process.

Another key concept regarding design, in addition to these more established ideas, is the idea of learner participation. Many distance education programs are so highly structured that they give the students little autonomy. Students must follow a precise sequence of materials, may omit very little, and can introduce little of their own experiences. While the objective of maintaining high academic standards may be achieved by such standardization, students can acquire an idea of knowledge as passive and unproblematic, bought in a package, like a commodity.

To overcome this, some recent programs provide opportunity for students to explore outside the course, to use their own self-discovered learning, to use their own experience, and to share it through peer teaching at a distance. These attempts to support greater learner independence is one of the most important developments in course design in distance education at the present time.

Students

The big distance universities provide comprehensive information about such vital statistics of their students as their ages (one in three British students is over age 44), their sex (in Germany they are 25% female, in Canada 60%) and their employment status (in all countries the majority are in some form of employment).

In an American survey of 8,000 students enrolled in Annenberg/CPB Project courses, it was found that: a) over 2/3rds of the students were female; b) 77% were older than college-age; c) 20% were enrolled only in the one course, and 15% had not taken any other courses for six years or more; d) 80% were using the course to accelerate their college education. This study found a dropout rate of some 5–10% more than in conventional higher education.

Dropout has been a much-researched phenomenon in distance education. Research at the Open University shows that of those people who persist in their course to the point of taking a final examination, over 90% complete the course. However, about 24% drop out before then, leaving a completion rate of some 75%.

Counseling

When students are asked to report their study difficulties, planning and scheduling problems appear high on their list. Study-related problems most often concern family commitments, career motivation, and anxiety about learning. Most distance education systems make provisions for some form of learner counseling. UKOU students have access to a personal counselor who is available throughout their university careers on a face-to-face basis if necessary. Annenberg/CPB Project students have access to an instructor on the campus of participating institutions. University independent study divisions provide counseling by telephone and by mail, as do most private home study schools.

Nonprint Media

When we turn from correspondence instruction to teaching through telecommunications, broadcast and other nonprint media, we enter a fast-changing and confusing area in distance education.

There are several reasons for using the nonprint media. There is considerable evidence that students vary in their learning styles, so that the more approaches that are used, the better the chance of students understanding, and reaching deeper levels of understanding. Some media are stronger instructionally because they give learners more control over the learning materials and so make it possible for them to be more active. They also provide better forms of feedback, so making learning more individualized. Some new media are more cost effective than older media. Some of the newer media are getting very easy to use so that the distance teaching materials are less difficult and time-consuming to design.

Among the more common media now being used are broadcast television and radio, cable TV, satellite TV, audiocassettes, videocassettes, telephone conferencing systems, microcomputers, viewdata and teletext and videodiscs. Attempts have been made to use each of these as the primary medium of distance teaching, while all or most are used in the major multimedia programs.

Television

The advantages of television are well-known; it gives the student a view of activities that are too expensive for direct experience, such as expensive experiments, overseas field visits, microscopic observations, and industrial processes; it gives insight into a wide range of social and personal interactions, as well as drama, archive film, and interviews with politicians, researchers and educators. Broadcasting television has distributional advantages over other forms of television such as cable, satellite, cassette, and discs, since in developed countries virtually everyone can see broadcast transmissions.

The limitations of broadcast television include not only difficulty in obtaining transmission times that are convenient for the learners, but broadcast television has been found to have certain educational weaknesses. Programs are ephemeral, since they cannot be reviewed or interrupted; they elicit a passive response, and are usually too open-ended and loosely structured for rigorous study. Properly used, they give students the opportunity to practice the high level skills of analysis, of applying abstract principles to real world situations, of evaluation and generalization. However, it has been found that students have great difficulty in using television programs in these ways.

Video

A videocassette loan service makes programs that were prepared for broadcasting available on a mail order basis. This results in an increase in the viewing rates for these programs. Cassette viewers report that cassettes enable them to achieve greater understanding of the material presented. The advantage of videocassettes over broadcasting is that of increased student control. The student can watch when she wants, as often, and with as many pauses or replays as necessary. Even with videocassettes, however, students tend to follow the storyline of a program and concentrate on the factual content rather than attempt to analyze the relationships or underlying messages contained in it.

As suggested above, the ability to handle such materials can be enhanced by the design of the programs themselves. Programs prepared specifically for use as videocassettes rather than for broadcasting are typically divided into short sequences of a few minutes duration, and at the end of each sequence, students are directed to stop and take notes or discuss what they have seen and heard. The programs are highly integrated, physically and conceptually, with the course texts and study guides.

An Open University project team has produced a videodisc in materials science, developed around an existing television program, with additional film sequences and computer control that turn it into an interactive tutorial. The interactive software is designed to allow the student to take part in calculations, decision-making and problem-solving.

Audio

As with videotapes, audiocassettes give students freedom to listen at a time and place convenient to themselves; they can stop, pause and replay, and thus organize their study approach according to personal style and preference. It is argued that cassettes give students many of the advantages of the written text. They are adaptable to such techniques as skimming and reviewing, and learners can control the pace and the methods with which they engage the particular content.

Cassettes can be presented in combination with visual materials. Students can be asked to pause, replay, answer questions or engage in activities which the instructor builds into the tape. Activities may consist of comprehension tests or revision exercises, or may aim to develop practical skills, such as the drawing of graphs and diagrams, guided by the tutor's commentary. Visual materials include maps, geological specimens, chemical solutions, color filmstrips of paintings or architecture, and tables of statistics, and students are given cross-references to the printed text. The Open University is now producing over 100 hours a year of new cassette material, and mails roughly half a million cassettes per year to students.

CAI

The main areas of computer-assisted instruction in university distance education are computer-based tutorials, learning about statistical packages in mathematics and the social sciences, and providing simulations in science and technology. Like other institutions, universities have to struggle with problems arising from the incompatibility of software for the array of home micros on the market.

The Open University sends out microcomputers to students on certain courses, and special purpose home computers have been designed for professional audiences such as managers, engineers and school teachers. There are many issues which require consideration before it can realize its potential in distance education. These include access, integration with the course assessment, support, and training for tutors. One of the impacts of research and evaluation at the Open University has been a move away from the broad use of CAI, towards its use in specialized, high quality pockets where it is considered particularly appropriate.

Radio

In Europe and North America, radio broadcasting, as a medium of distance education, is in decline. This decline has been parallelled by an increase in the use of audiocassettes, mailed to students with their printed course materials. In courses that still have radio broadcasts, programs are aired late in the evening or in the early morning, and most students record them off-air. Radio is used to deliver lectures, interviews, source materials such as recordings of historic interest or music, with comments by an academic; "radio vision" is a talk illustrated by visuals such as printed diagrams and pictures or slides.

Telephone

Telephone conferencing is an ideal way of linking distant learners to the instructor and to one another and allows immediate interaction between and among them. While no other university has gone as far as the University of Wisconsin, which has more than 200 sites joined in a private system known as the Educational Telephone Network, many use the public telephone system for both seminars and individual tutorials. Many new opportunities are being offered by the many developments in telephone technology that are occurring in both the U.S.A. and Great Britain as a result of "deregulation" in both countries. They include videoteleconferencing, with the visual element being freeze-frame (still pictures), compressed video (partial motion), and the most expensive, two-way full-motion, requiring two television channels.

One of the most popular recent developments in this area is Instructional Television Fixed Service (ITFS). This provides video in only one direction to accompany a two-way audio conference. The signal is picked up on a satellite receiving dish and can be transmitted by air over a 25 mile radius. Satellite network systems permit the development of programming for national audiences in countries as large as the United States and Brazil, or across the continent of Europe. American institutions of higher education have satellite receiving dishes, but uplinking and transponder costs are still high, and fewer institutions are prepared to originate programs than to receive.

Cyclops

Cyclops is a shared screen technology developed at the British Open University consisting of terminal with a light-sensitive writing pen, an electronic digitizing pad, and two telephones: one for voice communication, the other for transmitting Cyclops diagrams via a modem to a standard TV set.

Tutorials are provided to study centers linked via a conference bridge. Cyclops is completely interactive both in speech and in image creation. Charts, diagrams, etc. are communicated over the telephone, while students and tutors in different locations speak to each other and interact by means of the light pens and scribble pads. Each has equal access to the shared screen, and anyone can add to, alter or change what is displayed. It is this potential for group and individual intervention and interaction which makes Cyclops a useful teaching medium.

Teletext

Teletext is an electronic data distribution method, using broadcast and/or cable as the transmission medium. Materials such as correspondence texts can be transmitted overnight and recorded by users on low cost audio cassette recorders at high data rates. When two-way cable is available, teletext will become an interactive medium and thus more useful in its educational applications.

View-data

View-data, sometimes called videotext, allows users to access information stored in a remote computer via the public telephone service, and display it on a domestic television set. View-data provides an easy-to-use information retrieval system, and in addition, computer assisted learning, messaging and conference systems are possible. View-data can provide a cost effective use of the universities' central computers, the advantages at first being administrative, but followed by educational applications such as computer-assisted feedback to learners.

Cable

Half of America's households have cable television. Though the growth of cable TV has slowed, households typically have access to at least 25 one-way cable channels. Some of these channels are available for educational programming. Cable offers the possibility of transmitting to smaller numbers of students than is economically viable with broadcasting. Educational computer software and interactive video systems make it possible for students to receive learning programs on their personal computers.

We have touched very briefly on only a few of the media now being used by distance teaching universities. A great deal of development is occurring in the world of communications technology. Of course, it is important that educators keep up their awareness of what technology is available, and experiment with that which seems to meet their needs. However, among the lessons distance educators have to learn about new media is that there is no super medium. If there is any possible exception to the lesson of "no super medium," it is that the printed text, and the written word, carry the main burden of instruction, and are preferred to all other media by an overwhelming proportion of both students and teachers. The lesson for course designers is not to select one or two favored media but to use a range of media in a planned and integrated manner so that a variety of educational functions and approaches can be offered.■

PART III

INDIVIDUAL STRATEGIES FOR MEETING THE NEEDS OF ADULT LEARNERS

Module 8	*Providing Opportunities for Self-Directed Learning*
Module 9	*The Importance of Experiential Learning*
Module 10	*Effective Strategies for Teaching Adults*

Module 8

Providing Opportunities for Self-Directed Learning

–What is Self-Directed Learning?
–Why Self-Directed Learning?
–How is Self–Directed Learning Implemented?
–Managing SDL with Learning Contracts
–References
–Reprints

Providing Opportunities for Self-Directed Learning

Preview

Although the concept of Self-Directed Learning (SDL) dates back to Lindeman's work in 1926, interest in SDL was freshly stimulated by Knowles' andragogical assumption that adults are naturally self-directing. Knowles defined adulthood, in fact, as "the point at which individuals perceive themselves to be essentially self-directing" (1980, p. 46).

To facilitate SDL, many educators began to re-define faculty roles, re-design academic programs, and modify educational policy. The success of these efforts has recently been questioned, and the assumption they are based on critically scrutinized. In the pages that follow, the results of this inquiry will be provided along with the opportunity to evaluate the relevance of self-directed learning to your own instructional planning and practice.

Goals

In this module, you are invited to:

- Assess your own perceptions of adults as self-directed learners
- Determine the degree to which self-directed learning represents a functional need as well as a developmental goal of the adult learner
- Evaluate the validity of criticisms of self-directed learning and its implementation in the institutional setting
- Devise strategies for implementing self-directed learning in your own educational setting
- Evaluate the utility of learning contracts as one way to operationalize self-directed learning

What is Self-Directed Learning?

Definition

In its broadest sense, self-directed learning "describes a process in which individuals take the initiative, with or without the help of others, in diagnosing their learning needs, formulating learning goals, identifying human and material resources for learning, choosing and implementing appropriate learning strategies, and evaluating learning outcomes" (Knowles 1975, p. 18). This definition has been consistent with that of other adult learning theorists (Houle, 1961, Tough, 1966, Penland, 1977, Moore, 1980, Hiemstra, 1988) who describe self-directed learning in terms of the initiative, responsibility, and autonomy which the learner brings to educational pursuits.

Throughout the literature, other labels have been used to describe the process of self-directed learning. Some of the more common ones include self-education, self-instruction, self-teaching, self-planned learning, self-managed learning, self-study, independent study, and autonomous learning. It is important to point out, however, that many of these labels imply learning in isolation, whereas true self-directed learning usually occurs in association with teachers, tutors, mentors, peers, and resource people (Knowles, 1975 p. 18).

Exercise Take a moment to evaluate your own ability as a self-directed learner, using the assessment provided below.

How Self-Directed Are You in Your Learning?

To what extent do you agree with these statements?
(Check the appropriate column).

	Strongly Disagree	Disagree	Agree	Strongly Agree
1. I usually can generate highly creative solutions to problems I encounter.	☐	☐	☐	☐
2. I prefer learning on my own—usually I accomplish what I set out to learn.	☐	☐	☐	☐
3. I'll never get tired of learning new things.	☐	☐	☐	☐
4. Much of my time is spent on *future* issues.	☐	☐	☐	☐
5. I know that I am responsible for my own learning. If I don't learn something, it's my own fault.	☐	☐	☐	☐
A. Number of checks per column	☐	☐	☐	☐
B. Multiply	×1	×2	×3	×4
C. Total	☐	☐	☐	☐

Add totals on line C for your score and compare to the chart below:

Total Score	Indication of SDL Readiness*
4-10	Low
11-15	Medium
16-20	High

*For a valid indication of self directed learning readiness, individuals are cautioned to use the Self Directed Learning Readiness Scale. To obtain a sample copy, contact Dr. Lucy Guglielmino or Dr. Paul Guglielmino, 734 Marble Way, Boca Raton, FL 33432

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Questions

How did you do on the self-assessment? How closely do you fit the classic description of a self-directed learner? In what ways does your personal approach to SDL differ?

Questions

What are some of the intellectual skills that might facilitate self-direction? What kinds of management skills would be useful?

Why Self-Directed Learning?

Key Issues

As a goal for the adult student, the development of self-directed learning skills is important for at least three reasons:

1. Evidence shows that people who take the initiative in learning learn more than passive learners.
2. Self-directed learning is more in tune with the psychological orientation of the adult (increased independence and responsibility).
3. Development of learning initiative and inquiry skills is important in a world where facts become quickly obsolete.

The first statement is a universal truth for all learners, adult and otherwise.

Tell me, I forget
Show me, I remember
Involve me, I understand

Ancient Chinese proverb

The second statement was a topic of discussion in Module 2. It is important to remember that although self-direction is a developmental task of adulthood, this orientation does not always translate into the educational setting. Why? Because, as children, the school experiences of many adults have been highly structured and teacher-directed. These learners have come to expect their re-entry experiences to be similar, and are often unprepared and/or unwilling to try the SDL approach.

The third statement reflects Toffler's concept of "future shock" which describes a future world in which rapid change is the only constant characteristic (Toffler, 1971). It is no longer realistic for education to confine itself to the teaching of what is known, especially when the half-life of traits and skills may be ten years or less.

Related to this trend is the growing dissatisfaction among many employees with jobs that are monotonous and unchallenging. The increasing emphasis on personal growth suggests that many adults are ready for self-directed learning (Guglielmino & Guglielmino, 1988).

> *In a world that is constantly changing, there is no one subject or set of subjects that will serve you for the foreseeable future, let alone for the rest of your life. The most important skill to acquire now is* ***learning how to learn****.*
>
> John Naisbett, *Re-inventing the Corporation*

Questions

What evidence, if any, do you see that suggests that adults are more predisposed to self-directed learning than they have been in the past? Is there any difference in the types of learning projects attempted? Is their approach to SDL any different?

Key Issues

The principles of self-directed learning are at the core of what Knowles (1980) described as "andragogy"-- the art and science of *helping* adults learn. It is to be contrasted with teacher-directed learning which is the basis of pedagogy (the art and science of *teaching* children). The tables which follow summarize the classic andragogical perceptions about learning in both teacher-directed and self-directed learning situations.

TABLE 8-1: ASSUMPTIONS ABOUT LEARNING

PEDAGOGY	ANDRAGOGY
Learner is dependent	Learner is self-directed
Learner needs external rewards and punishment	Learner is internally motivated
Learner's experience is unimportant	Learner's experience is valued
Subject-centered	Task or problem-centered
Teacher-directed--instructor exclusively diagnoses learning needs, formulates goals, selects activities, and evaluates outcomes	Self-directed--learner participates in the diagnosis of learning needs, formulation of goals, selection of activities, and evaluation of outcome

Adapted from Knowles, M. S. (1975). *Self-Directed Learning*. New York: Association Press.

TABLE 8-2: ASSUMPTIONS ABOUT THE LEARNING ENVIRONMENT

PEDAGOGY	ANDRAGOGY
The climate is authoritative	The climate is relaxed and informal
Competition encouraged	Collaboration encouraged
Teacher sets goals	Teacher and class set goals
Decisions by teacher	Decisions by students and teacher
Lecture by teacher	Process activities and inquiry projects
Evaluation by teacher	Evaluation by teacher, self, and peers
Teacher-directed	Self-directed

Adapted from Knowles, M. S. (1975). *Self-Directed Learning*. New York: Association Press.

Sheckley (1985) maintains that self-directed learning would be facilitated if educators placed greater emphasis on intrinsic motivation in their course designs. Staw (1978) discusses several guidelines for providing increased intrinsic motivation.

- Increasing the variety of learning tasks
- Encouraging the resolution of uncertain situations
- Providing opportunities for social interaction
- Designing options for projects that encompass an entire course
- Allowing individuals to design and be responsible for their own learning process
- Assisting in the removal of internal and external barriers
- Providing formative feedback throughout the semester

Criticisms

Critics of the andragogical model such as Stephen Brookfield warn against using the premise that adults are self-directed as a starting point (1986, p. 96). Taken to its logical conclusion, this premise suggests that it is unnecessary to teach adults anything, only to facilitate the execution of learning efforts they have designed for themselves. Brookfield further argues that to take learners' definitions of need as the determinant of appropriate teaching practice is to reduce the teacher to the role of a technician within a consumer mode (p. 97).

Another criticism of the andragogical model revolves around the definition of self-directed learning itself. Strong (1977) and Chene (1983) have maintained that autonomy is not so much a matter of methodology as of critical thinking and decision making. If self-direction is conceived entirely in terms of self-instructional techniques, it is possible for a student to become an expert in the process of SDL, and yet be unable to question the validity of his or her intellectual pursuits. Self-directed learning is as much an internal change of consciousness as it is an external management of instructional events (Brookfield, 1986, p.56).

Cunningham (1982) questions the feasibility of implementing SDL in formal education: "To what extent can learners be in charge of goals, setting methodological choice, and evaluation when traditional institutions maintain ultimate control of these functions?"

Question

As an educator, how can you resolve the tension between the need to produce technically competent persons according to institutional criteria, and the adult learner's own attempts to prescribe his/her own learning?

Article

The following article summarizes some of the important issues and research related to self-directed learning. The authors also discuss how faculty roles can be restructured to maximize the development of self-directed learning skills. Read the article, reprinted at the end of the module. Then return to this page and answer the questions that follow.

Schuttenberg, E. M. and Tracy, S. J. (1987). The role of the adult educator in fostering self-directed learning. *Lifelong learning*.

Questions

In view of the evidence and criticisms presented, what is your conclusion with respect to the validity of SDL as a foundation for adult teaching practice? How would you modify this approach to make it more useful in your own practice?

Question

How would you go about diagnosing learners' readiness for self-directed learning?

Questions How could you implement SDL in your particular situation? Would your strategy accommodate individual learners? If so, how?

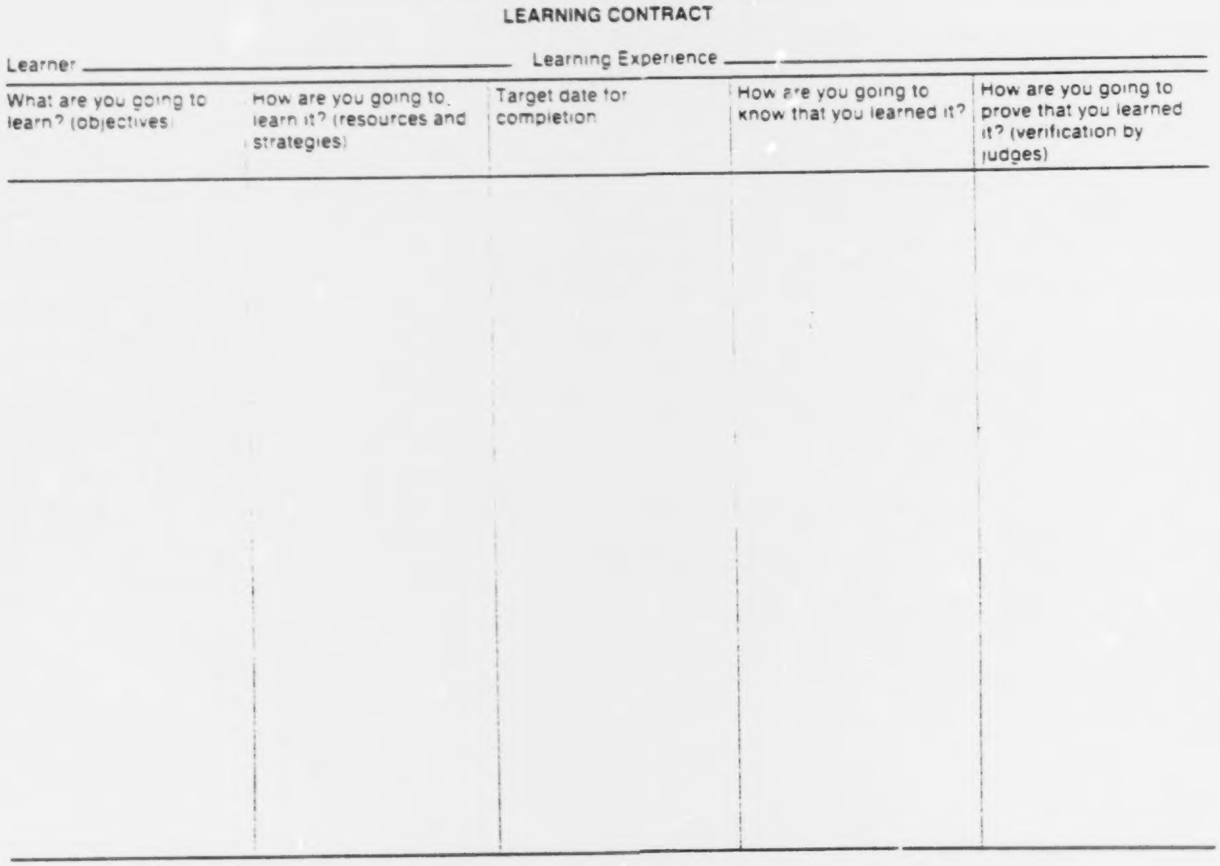
Question How would you modify your own role as an educator to facilitate self-directed learning?

Key Issues

One technique frequently cited as facilitative of the self-directed learning process is the use of *learning contracts*. The learning contract is often helpful in reconciling the academic requirements often imposed by educational institutions with the learner's need to be self-directed. It has the added advantage of making the mutual responsibilities of the learner, the teacher, and the institution more visible to the relevant participants.

FIGURE 8-1: SAMPLE LEARNING CONTRACT

Figure 1. A Learning Contract form



LEARNING CONTRACT

Learner ____________ Learning Experience ____________

What are you going to learn? (objectives)	How are you going to learn it? (resources and strategies)	Target date for completion	How are you going to know that you learned it?	How are you going to prove that you learned it? (verification by judges)

Galbraith, M. W., & Gilley, J. W. (1984, October). Using self-directed learning contracts to improve performance and instruction. *Performance and Instruction, 23*(7).

Article

The use of learning contracts is most appropriate in graduate courses where the academic requirements are defined loosely enough to accommodate the student's individual interests. The following article describes a study in which learning contracts were used in such a setting, and discusses the results. The article is reprinted at the end of the module.

Cafferella, R. S. (1983, November). Fostering self-directed learning in post-secondary education: The use of learning contracts. *Lifelong learning*.

Questions

What are the benefits of using learning contracts? What are the limitations?

Application

Is it feasible to integrate learning contracts in your practice setting? If so, how might you use them? How do you perceive your role relative to that of the student in developing and implementing a learning contract?

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By Ernest M. Schuttenberg and Saundra J. Tracy

The role of the adult educator in fostering self-directed learning

In their landmark study of the educational pursuits of American adults, Johnstone and Rivera (1965) discovered that nearly nine million persons were involved in independent learning. They concluded that "self-instruction is probably the most overlooked avenue of activity in the whole field of adult education" (p.37). Not anymore. During the 1970's and 1980's, studies of this area have burgeoned; and the focus on self-direction in adult learning is becoming much more clear.

Penland (1979), in his investigation of self-initiated learning in the United States, found that nearly 80% of the over-18 population considered themselves continuing learners, while only a very few (2.9%) used formal courses as their sole educational strategy. Tough (1979), in the second edition of his book on *The Adult's Learning Projects*, reported that "probably 90%" of adults conduct at least one major learning project per year and that the "typical learner" spends "an average of 100 hours per learning effort" (p.172).

Recognizing the extent of the self-directed learning phenomenon, theorists and researchers of the 1980's have turned to its purpose and quality and to the investigation of what role adult educators should play with regard to self-directed learning. The rapid development of the information society argues for the need for adult educators to play an active role in enhancing adults' abilities in self-directed learning. Classroom experience and recent research (Tracy & Schuttenberg, 1986), however, have indicated that some adults prefer direction in the learning process for reasons of efficiency, reliance on instructor expertise, or familiarity with traditional instructor-student roles. The result is that the adult educator may be caught between what he or she feels the role should be and what role may be desired by the learner. The dilemma deepens when one realizes that to move the learner who is not self-directed toward self direction may at times require a directive approach. What, then, is the role of the adult educator in fostering self-directed learning?

This paper will investigate three roles of the adult educator in light of varying conceptions of self-directed learning (SDL) found in the literature. It will address the issue of when self-directedness is desirable and for what purposes. The paper will also suggest educational processes that foster SDL from the viewpoints of the three adult educator roles, and it will discuss implications for future SDL research.

Adult Educator Roles

The adult educator may assume the role of leader, collaborator, or colleague. All three of these roles can be found in the literature on self-directed learning. Of the three, the leader role is the most directive. This role stems from the definition of an educator as "one who teaches." The image portrayed is the instructor in front of the class – an image of control. The leader moves the learners toward self-direction, with or without their cooperation. The leader role does little, in itself, to bring about self-directedness. Combined with other roles, however, it may be an initial step toward helping adult learners move toward self-direction.

In the role of collaborator the adult educator is portrayed as sitting with the learners side by side to assist them in achieving their goals. This role is more facilitative than directive. Control of the learning situation is shared between the educator and the learners. Joyce and Showers (1982) refer to this kind of collaboration as "coaching." The educator's expertise is selectively imparted at the learners' request. This role is the one most often promoted in the literature on self-directed learning. It assumes that the learner has advanced to the stage of being ready to try out previously-attained knowledge or skills but he or she needs assistance and feedback during these trials.

The third image of the adult educator is that of colleague. Here the adult educator assumes the position of co-learner. It is recognized that sharing one's own process of learning with others is also teaching. This role does not seek to force or promote self-direction but to model it. The collegial role may appear interspersed with the other two roles. In fact, the adult educator may move among all three roles within a single educational experience.

Literature Review

As suggested earlier, a major reason that it is difficult to determine the role of the adult educator in fostering self-directed learning is that there is no conception of SDL commonly agreed upon. Some authors have defined SDL as a set of skills that adult learners must master. Others have considered SDL an instructional mode or process. Still others have conceptualized SDL as an active philosophical and motivational stance toward oneself and society.

Among those who consider SDL a set of skills to be mastered is Knowles (1975). Knowles feels that, in order to foster self-direction in learning, the instructor would require the learner to propose in writing what will be learned,

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what resources will be utilized, and how learning results will be evaluated. Such planning or contracting skills, carried out in collaboration with the instructor and other learners, are essential components of adult educational self-direction.

Bruner (1985) believes that SDL is related to effective decision-making skills. To help learners move toward self-direction, adult educators should make them aware of an array of learning possibilities and arm them with procedures and sensibilities to choose from the array wisely. Cheren (1983) defines the role of an adult educator as one who helps learners exercise various skills in self-direction while providing continuous reinforcement of the learner's self image as self-directing.

Not all self-directed learners may require a mastery of formal educational skills. From an interview study of self-directed learners with less-than-high school completion, Spear and Mocker (1984) found that many did not employ formal planning processes but, rather, proceeded heuristically, reacting to various kinds of life circumstances which structured their learning processes. However, it is likely that even such "self-taught" learners could benefit from further knowledge of self-directed learning skills.

Among the authors who consider SDL an instructional mode or process is Brookfield (1985a). He feels strongly that adult education should be a collaborative endeavor. To foster self-direction, the adult educator and the learners should engage in continuous negotiation and evaluation of learning priorities and activities.

Brockett and Hiemstra (1985) reported 11 policy recommendations for adult learners, continuing educators, and adult education agencies for the promotion and implementation of self-direction in learning. Two of the policy recommendations stressed collaborative approaches: (1) "To capitalize on synergistic learning efforts, we must form autonomous learning groups," and (2) "To enhance our self-esteem and validate our progress, we need reinforcement and encouragement from others" (pp. 36 & 37). In a related concept, McKinley (1983) sees the adult educator as a co-learner who functions during the educational process as a resource provider rather than as an expert and judge.

Newman ("Excerpts from Newman's report," 1985) sees SDL as a way of thinking and behaving regarding the learning process. He feels that in order to foster self-direction in learners, adult educators should encourage them to become actively involved with other learners and the educator by questioning, selecting projects and research topics, and fashioning their own conclusions.

Among the authors who have conceptualized SDL as an active philosophical and motivational stance are Brookfield and Mezirow. Brookfield (1985a) suggests that SDL is related to adults' freedom and their willingness to make personal changes. To promote SDL, the adult educator should present alternative ways of interpreting the world and should assist learners to reflect on ways in which values, beliefs, and behaviors, previously deemed sacrosanct, can be critically analyzed and changed. Brookfield (1985b) stresses that "we should distinguish between the techniques of self-direction and the internal change of consciousness that we can call self-directed learning" (p. 14).

Moving beyond individual change, Mezirow (1985a) sees SDL as involving societal change and improvement. To bring about responsible SDL, learners should be encouraged to engage in individual and collective action which may include efforts towards changing established social institutions. "We have the obligation . . . not to lead or organize for collective action but to help learners become aware of the cultural contradictions that oppress them . . ." (1985b, p. 29). In a recent work, Brookfield (1986) suggests a similar idea as he defines SDL as "assisting adults to free themselves from externally imposed direction in their learning and . . . to become proactive, initiating individuals in reshaping their personal, work, political, and recreational lives" (p.60).

A Model For Change

Figure 1 depicts a suggested model for fostering self-directed learning. This model is designed to guide adult educators in selecting approaches to foster SDL based on the level sought and on the previous development of the learners in becoming self-directing.

See Figure 1

On the horizontal axis of the model are the three conceptions of SDL explained earlier in this paper and their corresponding levels of change. The first conception is that SDL is a set of skills. Change at this level is in behavior. For example, the adult must develop the skills to write a learning contract completely and accurately. The second conception is that SDL is characterized by certain instructional processes, and the corresponding mode of change is interaction. For example, the adult must learn to work effectively with colleagues as co-learners. The third conception is that SDL is a philosophical and motivational stance. At this level, change is in learners' values. For example, the adult

Figure 1
A Model for Fostering SDL

Conceptions of SDL and (Levels of Change)

	Skills (Behaviors)	Processes (Interactions)	Philosophies (Values)
Leader (Directing)	1		
Collaborator (Coaching)		2	
Colleague (Modeling)			3

Roles and (Processes) for Adult Educators must come to place value in taking the initiative for one's own learning and for creating changes in life and in society.

The vertical axis lists the three roles of adult educators discussed earlier—leader, collaborator, and colleague—and their three corresponding teaching/learning processes—directing, coaching, and modeling. The model, then, contains nine cells representing the strategies suggested by the interactions between the three roles and the three levels of change.

Implications for Practice

Not all nine strategies are viable. Figure 1 highlights the strategies proposed as most effective. To bring about change in behavior—the acquisition of skills, such as contracting or goal setting—behavior shaping techniques are most appropriate. Behavioral change requires directive leadership in defining the desired outcomes and in arranging the contingencies of reinforcement so that the outcomes are achieved. In helping adult learners develop SDL skills, therefore, the adult educator's role should be that of leader or director.

In helping adult learners develop new instructional processes or interaction patterns characteristic of self-directed learning, directive approaches are inappropriate. Here a collaborative role is called for. The adult educator works with the learners, sharing ideas and decisions and coaching them to collaborate in new ways during the learning process.

To encourage adults to change their philosophical and motivational stance and to alter their values regarding the adoption of a more proactive approach to changing themselves and their environment, direction and coaching by the adult educator are likely to be less effective than the collegial approach of modeling. The adult educator must demonstrate such behavior by words and actions if the adult learners are to risk changing their values and acting on new commitments.

To summarize, the leader role is most appropriate for changing SDL behaviors, the collaborator role is most appropriate for changing SDL interactions, and the colleague role is most appropriate for changing SDL values. Moreover, it is proposed that these roles should be employed sequentially. That is, adult learners must possess basic SDL skills before they will be ready to benefit from collaborative instructional processes; and they must be somewhat experienced in collaborative processes before they are ready to change their values to a more proactive stance. Therefore, the overall strategy for fostering SDL in adults is to begin where the learners are and work with them sequentially through the SDL strategy model.

Conclusions and Recommendations

The model presented in this paper is based upon the belief that adults have the potential of attaining various degrees of self-direction in learning. While some of the literature in the field has implied that all adult learners should become self-directing to the same degree, this model considers SDL to be developmental in nature. It assumes stages of growth in self-directedness—an assumption borne out in the experiences of many educators of adults. And it allows for the likelihood that some adult learners may desire a lesser degree of self-directedness than others.

The model advocates that adult educators should adapt their teaching strategies to the levels of learners' development. Only as learners demonstrate mastery of lower-level SDL skills can educators successfully facilitate the development of higher-level SDL competencies. As a computer student would not be expected to design a complex program without first learning to operate a computer and receiving feedback on simple program designs, so an adult learner must learn the technical skills of self-direction before being expected to change his or her world for the better. And, just as all computer students may not have the aptitude or desire for complex computer programming, not all adults may have the aptitude or desire for reaching a level of high complexity in self-directed learning.

To implement this model, adult educators must consider three issues: (1) how to diagnose learners' development in SDL; (2) how to individualize instruction in SDL; and (3) how to become proficient in several teaching roles or strategies.

Diagnosis will need to be accomplished by a formal or informal pretest. Instruments such as "The Self-Directed Learning Readiness Scale" (Guglielmino, 1978) may be used to diagnose the levels of adults' SDL competencies. More informal methods, such as observing how adult learners respond to different educator roles, may also be used. The adult educator may begin with the collaborative role and adjust his or her style toward leader or colleague based on learners' reactions.

The dilemma of individualizing instruction to meet separate learners' SDL needs is not easy to resolve. Further research is needed to identify ways that adult educators can deal with learners at various SDL levels within the same group. At minimum, the adult educator should design group and individual learning experiences congruent with each of the three roles identified in the model and use them creatively with subgroupings of adult learners.

The issue of adult educators' proficiencies in the various teaching roles or strategies may be the greatest obstacle to the implementation of the SDL model. Even though supported by sound theory, full implementation may not occur. The public schools' failed emphasis on individualization of instruction in the early 1970's is a graphic example of this problem.

Much time and energy is required to implement multi-role individualized instruction. Besides the time consideration, many adult educators' current repertoires may consist primarily of directive instructional techniques appropriate only to the leader role. Further training and experience may be needed to enable many adult educators to operate effectively, first, as self-directed learners themselves, and then as coaches and models for potential self-directed learners.

Despite possible difficulties in implementation, the Model for Fostering Self-Directed Learning attempts to reconcile some of the contradictions of past SDL theory and practice and to propose a coherent strategy that adult educators can employ in fostering self-directed learning. It also provides a framework for conducting research to investigate existing gaps between theory and practice. Adult educators must systematically study current SDL practices before new strategies, such as those proposed by this model, can be fully implemented. **AAACE**

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By Rosemary S. Caffarella

Fostering self-directed learning in post-secondary education:

The use of learning contracts

Introduction

The major purpose of this study was to determine the educational value and worth of using a learning contract format in graduate level courses in relationship to the students becoming more self-directed in their learning efforts. Self-directed learning is a process in which individuals take the initiative, with or without the help of others, to gain certain definite knowledge and skills (Knowles, 1975; Cross, 1981; Smith & Haverkamp, 1977).

Tough (1971) and Knowles (1975) have outlined basic skills that are needed for self-directed learning. Among those skills are the following:

1. The ability to decide what knowledge and skills to learn;
2. The ability to diagnose learning needs realistically, with help from teachers and peers;
3. The ability to translate learning needs into learning objectives in a form that makes it possible for their accomplishments to be assessed;
4. The ability to relate to teachers as facilitators, helpers, or consultants and to take the initiative in making use of their resources;
5. The ability to relate to peers collaboratively, to see them as resources for learning;
6. The ability to identify human and material resources appropriate to different kinds of learning objectives;
7. The ability to select effective strategies skillfully and with initiative;
8. The ability to gain knowledge or skill from the resources utilized;
9. The ability to evaluate one's own work and get feedback from others about progress;
10. The ability to detect and cope with personal blocks to learning;
11. The ability to renew motivation for learning when motivation lags.

Tough (1971) introduces the premise that "major changes are needed in the various institutions of education" to better foster this process of self-directed learning (p. 147). He states that educators must abandon the concept that "we know best, we are the pedestal, we will do all of the planning and decision making" (Tough, 1979, p. 11). We need to move toward instructors and students being equal as persons, increasing the students' choice of how and what they learn and providing assistance with self-planned learning (Tough, 1971).

Hiemstra (1981) has proposed a formal policy recommendation pertaining to this concept of self-directed learning in relation to the training of adult educators. He states that, "In conjunction with their respective institutions, adult educators will encourage and utilize the theories and practices of self-directed learning in classroom contact and application efforts" (p. 17). He further identifies the need for adult educators to "recognize the needs of their students by applying self-directed learning techniques to their own classroom setting where applicable" (p. 18).

Smith and Haverkamp (1977) agree with the thinking of Tough and Hiemstra. They believe "that learning how to learn activities should be built into the design of courses and workshops" (p. 9). One way to accomplish this objective is to use the learning contract as part of the activities for all courses of study (Knowles, 1975; Tough, 1979).

Learning Contracts

The learning contract provides a framework for describing what a participant will learn as a result of specified learning activity. The contract usually consists of four major components: 1) learning objectives; 2) learning resources and strategies; 3) evaluation of learning activities; and 4) criteria and means for validating evidence (Berte, 1975; Knowles, 1975; Lindquist, 1975). A key to the development of a learning contract is to make the learning activities "specific enough for students to proceed, yet flexible to permit initiative and creativity" (Avakian, 1974, p. 54).

Learning contracts have many uses in an educational setting. They can: 1) provide a way to deal with the wide differences among any group of learners (Knowles, 1980, Lindquist, 1975); 2) increase student motivation for learning (Schluster, 1979); and 3) facilitate the development of mutual respect between the educator and participants (Berte, 1975; Knowles, 1975; Schluster, 1979); 4) provide for a more individualized mode of instruction (Avakian, 1974; Berte, 1975; Knowles, 1975; Lindquist, 1975); and 5) foster the skills of self-directed learning (Knowles, 1975; Lindquist, 1975; Lehman, 1975; and Tough, 1979). This study is focused on the use of learning contracts to foster the competencies of self-directed learning in post-secondary education.

The Learning Plan Format In Graduate Courses

The author of this study has incorporated the idea of assisting persons to become more effective self-directed learners into a formal educational program by the use of a learning contract as part of the requirements for her

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graduate courses in adult education. The learning contract consists of five components: 1) learning objectives; 2) learning resources and strategies; 3) evidence of accomplishment of objectives; 4) criteria and means for validating evidence; and 5) time line for completing objectives (Knowles, 1975).

Students primarily use the course learning objectives prepared by the instructor. Students may also develop their own in addition to or in place of those given by the instructor. The learning strategies and resources describe how students will accomplish each objective. Resources may be both human and material. Examples of possible strategies that students use are writing research papers, taking field trips, analyzing case studies, reviewing the literature, and interviewing people. Evidence that students have accomplished a specific objective is presented in a number of formats. For example, for the knowledge domain, students prepare research papers or make in-class presentations, and for the skill domain, complete performance exercises or prepare video-taped performances. The criteria and means for validating evidence include both a description of how the outcome will be judged and who will judge those outcomes. For example, appropriate criteria for knowledge objectives might include comprehensiveness, depth, precision, clarity, and/or scholarliness. Validators might include such people as the course instructor, co-workers, supervisors, class participants and other faculty at the institution. The time line indicates when the students will complete each objective.

The process of developing these learning plans consist of three steps. In step one, the instructor gives to all class members a number of handouts related to the course (e.g., course syllabus, bibliography, outline on how to develop an individual learning plan). Within the first week of class, students have the responsibility of familiarizing themselves with all the materials. They are asked to think through the types of competencies (knowledge, skills, attitudes) they wish to develop related to the course content.

In step two, students complete an initial draft of their own learning plan. During the third step of the process, students share a draft of their learning plan with a consultation team of three to five class members. Based on these discussions and further input by the instructor, students then may revise the initial draft of their plan. It should be noted that students do find their ideas change throughout the course and thus re-negotiate their learning plan with the instructor.

Focus of the Study

The initial reactions of the students of the learning contract format were very positive and the students appeared to become more self-directed in their learning. The author of this study, however, had questions related to how students viewed the learning contract format once they completed their formal course work and to the carry-over effects of using such a format related to the students' own continuing learning activities. The major questions addressed in this study were as follows:

1. What are students' opinions related to the value and worth of using a learning contract format once they are no longer involved with formal course work in adult education?
2. Has there been any self-perceived effect of the students' competencies for self-directed learning as a result of using the learning contract format in a formal graduate course?
3. Have the students used the competencies of self-directed learning in personal learning experiences once they have completed the course(s)?
4. Has there been any change in the ways former students teach as a result of using the learning contract format?

Methodology

The procedure used in this study to answer the questions posed was survey research. Fifty-four graduate students who enrolled in the author's graduate courses in adult education during the past two years comprised the population for the study. The majority of these students were not studying adult education as their major field.

The Learning Contract Format Follow-Up Survey was mailed to each student along with a cover letter asking for their cooperation in this study. Of the fifty-four instruments mailed, forty-two were returned for a total return rate of 80%.

The Learning Contract Format Follow-Up Survey was developed by the author based on a literature review and initial evaluation feedback on using the learning contract format. This questionnaire consists primarily of Likert-type items with some multiple choice and open ended questions. The questions focused on their opinions related to the worth and value of the learning plan format, their perceptions of their own self-directed learning skills, and the effect, if any, on their own continuing learning and teaching activities. There are also questions related to demographic variables (e.g., educational background, present program of study).

A team of five experts reviewed the instrument for content and face validity. The reviewers included: Dr. Stanley Freeman, Professor, University of Maine at Orono; Dr. Lucy Guglielmino & Associates, Florida; Dr. Kay Kaverkamp, Assistant Dean of Learner Services, University of New Hampshire; Dr. Roger Hiemstra, Professor, Syracuse University; and Dr. Malcolm Knowles, Professor Emeritis, North Carolina State University. Changes were made in the instrument according to their recommendations. In addition, a pre-test of the instrument was done with graduate students who had enrolled in adult education courses with the author, but who were not included in the population for this study. A total of nine people, which is approximately 16% of the population to be surveyed, were included in the pre-test group.

The results of this study are descriptive in nature. The data were analyzed using the descriptive statistics routines in the Statistical Package for the Social Sciences (SPSS). The description of how all respondents collectively respond to the questions was done in simple percentages. Further analyses investigated the responses to selected questions in relation to four variables: 1) educational background; 2) student's graduate program; 3) number of adult education courses taken with the author of this study; and 4) present employment situation. Chi square tests of independence were used to ascertain whether there were relationships between these various factors and the variance in respondents answers to chosen questions. A significance level of .05 was used in the Chi square analysis.

Review of Findings

The students agreed that using the learning contract format was worthwhile. Sixty-nine percent of the students believed the contract to be an excellent learning tool, while 21.4% believed it to be very good and 9.5% good.

In terms of the specific learning processes, as illustrated in Table 1, the majority of the students either strongly agreed or agreed that the learning contract was valuable in formal graduate level courses. For example, 83.3% of the respondents strongly agreed that the learning contract placed the responsibility for learning more on them than other formats used in formal course work; 81% strongly agreed the learning contract assisted them in meshing their own learning needs/desires with the course requirements; and 76.2% strongly agreed that the learning contract gave them the opportunity to individualize their own learning.

All of the respondents believed the use of the learning contract should be continued in graduate courses in adult education. A number of suggestions were given by the students to improve the use of the learning contract in formal courses. Many of the suggestions focused on how to assist a new student with the development of a learning plan. As one student stated, "It takes some time to get used to it at first." Specific suggestions were 1) enlist the aid of "experienced students" to help the beginner; 2) give those with no experience more time to develop their learning plans; 3) allow the less experienced students to first develop a mini-learning plan and then complete a more indepth one; 4) supply examples of former learning plans; 5) for introductory course use a general learning plan in which most of it would be completed for the students; and 6) encourage students to pursue activities that are applicable to job/career in tangible ways.

Table 1
Percentage of Total Respondents Who Indicated the Value and Worth of Using the Learning Contract Format in Relationship to Specific Given Statments

Statements on Value & Worth of Using the Learning Plan Format	n	Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree
The Learning Contract Format (LCF) placed the responsibility for learning more on me than other formats used in formal coursework.	42	83.3	14.3	2.4	0.0	0.0
The LCF gave me the opportunity to individualize my own learning.	42	76.2	23.8	0.0	0.0	0.0
The LCF allowed me the flexibility to choose what I wanted to learn.	42	61.9	38.1	0.0	0.0	0.0
The LCF allowed me the flexibility to choose how I would learn the course content.	41	58.5	41.5	0.0	0.0	0.0
The LCF assisted in meshing my own learning needs/desires with the course requirements.	42	81.0	13.3	4.8	0.0	0.0
The LCF gave me the opportunity to apply the knowledge and skills I learned in the course to my own life situation (e.g., work, home).	42	54.8	42.9	2.4	0.0	0.0
The LCF served as a motivational tool for my own learning.	42	42.9	47.6	7.1	2.4	0.0
The LCF assisted me in gaining confidence as a self-directed learner.	42	38.1	42.9	11.9	7.1	0.0

The students did believe there had been an effect on the strengthening of their competencies of self-directed learning as a result of using the learning contract in their formal graduate work. As shown in Table 2, the majority of the respondents either strongly agreed or agreed they had increased their self-directed learning competencies in eleven selected areas. Of those eleven areas, the ones the students believed they had increased the most included 1) relating to teaching as facilitators, helpers, or consultants (52.4% strongly agreed and 38.1%); 2) translating learning needs into learning objectives in a form that makes it possible for the accomplishments of those objectives (42.9% strongly agreed, 47.6% agreed); and 3) identifying human and material resources appropriate to the different kind of learning objectives (40.5% strongly agreed and 52.4% agreed).

Almost half of the respondents (47.5%) had used the competencies they developed as a result of using the learning contract format in personal learning experiences outside of the classroom. One person used the learning contract when challenged to develop her own professional objectives. A second stated she now "emphasized process and self-direction in my work with those I supervise." A few spoke in terms of using specific competencies such as being better able to find educational resources and selecting new strategies for learning. One person even mentioned that she has used the competencies at home with her daughter to stimulate her motivation for learning.

Table 2
Percentage of Total Respondents Who Agreed or Disagreed With Statements Related to an Increase in Their Competencies for Self-Directed Learning as a Result of Using the Learning Contract Format

Statements on Increase in Respondents Self-Directed Learning Competencies	*n*	Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree
The learning contract format (LCF) has increased my ability to relate to peers collaboratively; to see them as resources for diagnosing needs, planning my learning, and completing my learning.	42	19.0	50.0	19.0	11.9	0.0
The LCF has increased my ability to diagnose my own learning needs realistically, with help when needed from teachers and peers.	42	21.4	61.9	11.9	4.8	0.0
The LCF has increased my ability to translate learning needs into learning objectives in a form that makes it possible for the accomplishment of those objectives to be assessed.	42	42.9	47.6	4.8	4.8	0.0
The LCF has increased my ability to relate to teachers as facilitators, helpers or consultants.	42	52.4	38.1	4.8	4.8	0.0
The LCF has increased my ability to identify human and material resources appropriate to different kinds of learning objectives.	42	40.5	52.4	7.1	0.0	0.0
The LCF has increased my ability to take the initiative in making use of the resources of my teachers.	42	38.1	50.0	9.5	2.4	0.0
The LCF has increased my ability to select effective strategies for using learning resources.	42	42.9	40.5	11.9	4.8	0.0
The LCF has increased my ability to execute the learning strategies skillfully and with initiative.	42	28.6	42.9	21.4	7.1	0.0
The LCF has increased my ability to gain knowledge or skill from resources utilized.	42	35.7	42.9	14.3	7.1	0.0
The LCF has increased my ability to detect and cope with personal blocks to learning.	42	23.8	42.9	21.4	11.9	0.0
The LCF has increased my ability to renew my motivation for learning when it lags.	42	19.0	47.6	23.8	7.1	2.4
The LCF has increased my ability to evaluate my own work and get feedback from others about my progress.	42	31.0	50.0	16.7	2.4	0.0

Sixty-four percent of the respondents have changed or anticipate changing the way they teach as a result of using the learning contract. Eleven of the respondents (28%) have actually used the learning contract either in the same or modified form in their teaching. This use has included both formal college level teaching and in-service training programs for human service and health related organizations. Other respondents reported changing specific aspects of their teaching, including allowing for more input by participants into objectives, course content and course requirements; using a greater variety of methods and resources; using participants as resources more often; using themselves as more active resource locators for their students; and in general attempting to involve the learners more in their own learning both in and out of the class situation. One student commented that though he hadn't specifically changed his teaching methods yet, he had changed his attitudes and ideas. "I like the concept of students taking responsibility for their own learning. I also like the collaboration among students which the learning contract fosters," he said.

Further analyses were completed on the data collected to ascertain the effect of the following variables: 1) educational background; 2) level and participation or non-participation in a graduate program; 3) number of adult educational courses taken with the author of this study; and 4) age of the student. None of these variables caused a statistically significant difference in the way the respondents answered the questions.

Conclusions

Three major conclusions emerged from this study. First these students believed that using a learning contract format in graduate courses is both valuable and worthwhile and that its use should be continued in graduate level courses. The majority of them strongly agreed that the use of this format was especially worthwhile in that it placed the responsibility for learning more on them, and assisted them in meshing their own learning needs and desires with the course requirements.

Second, these students did agree that they had increased their competencies as self-directed learners as a result of using the learning contract. Three specific competencies were highlighted by them as areas in which they had increased their skill the most: 1) relating to teachers as facilitators or consultants; 2) translating learning needs into learning objectives in a form that makes it possible to accomplish those objectives; and 3) identifying human and material resources appropriate to the different kinds of learning objectives.

Third, these students are currently using the competencies they learned through using the learning contract in their present teaching situations and personal learning experiences, both at home and at work. For example, some of the respondents reported changing the way they taught, while others commented on how they now involve the participants more in the planning and execution of the courses they teach.

As the use of a learning contract format appears to be effective in helping graduate students acquire the skills of self-directed learning, it is appropriate for educators to include this format as an integral part of their formal course work at the graduate level. This same assumption may also prove to be appropriate for others who teach in a variety of educational programs at the post-secondary level. The specific way a learning contract would be used might change, depending on such factors as the background and level of the learners, the focus of the educational experience and the setting in which it was used.

For example, an instructor in a freshman level writing course at a community college might have the students complete a learning contract on only two or three objectives of a course. She would outline for the students the rest of the contract based on the remaining course objectives. This would allow for some individualization by students in a planned way, and yet give the instructor a mechanism to ensure the basic principles of writing were mastered.

A professor leading an honors seminar might require the students to develop a full learning contract, including their own learning objectives, strategies, etc. This type of use of the learning contract would also be highly appropriate for instructors who are facilitating independent studies for students in a variety of disciplines.

One of the respondents did give a note of caution in using the learning contract approach. She observed that "the instruction leader must be skilled at this approach to learning/teaching. The instructor must be a full-time learner, must understand this concept of learning and must practice the concept correctly." **AAACE**

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Module 9

The Importance of Experiential Learning

–The Experience of Experiential Learning
–A Model for Experiential Learning
–Applying Kolb's Model in the Academic Setting
–Implementing Experiential Learning
–References
–Reprints

The Importance of Experiential Learning

Preview

The integration of experience and knowledge is not a new idea. Sophocles once observed that "one must learn by doing the thing: For though you think you know it, you have no certainty until you try" (Chickering, 1977, p. 14). Although the division between "learning" and "experience" has been an academic tradition for the past 700 years, many educational institutions are rediscovering that experience is, in fact, the best teacher. This renewed interest in experiential learning is good news for the adult learner, who usually re-enters the college or university with both a reservoir of prior experience and a pragmatic orientation to the learning process.

Goals

In this module, you are invited to:

- Determine the validity of the experiential approach to learning based on current research and theory
- Describe the role experiential learning currently plays or could play in your educational setting
- Evaluate Kolb's theory of experiential learning in terms of its validity as a model of adult learning and utility in guiding adult teaching efforts
- Evaluate your own instructional methodology in light of Kolb's concept of grasping and transforming mental processes
- Devise strategies for implementing experiential activities in your own practice setting

The Experience of Experiential Learning

Definition

In their book *New Directions for Experiential Learning: Learning by Experience--What, Why, How* (1978), editors Morris Keeton and Pamela Tate compared perceptions of "experiential learning" to the way in which certain Eskimo tribes relate to the concept of "snow." Historically, educators have been able to describe the various types of experiential learning -- laboratory science, applied studies, clinical experience, etc.-- but have found the generic term too ambiguous to be useful. In an effort to clarify the concept, Keeton and Tate defined experiential learning as learning "in which the learner is directly in touch with the realities being studied. It involves doing, as well as observing, hearing about, or merely talking about these realities, and can be accommodated as easily in the classroom as outside of it."(p. 2).

Key Issues

Adults are well aware of the value of experiential learning. With the experiences they have already gained through their formal education, their work, and their personal life, adults have already acquired a rich reservoir of skills and knowledge. Knowles (1980) cited four implications of this prior experience.

- Because of their reservoir of knowledge and experience, adults can become a resource for their own learning, as well as the learning of others.

- Experiential activities are helpful in achieving higher cognitive gains because the adult can readily relate new ideas to concrete situations.

- Adults must integrate new concepts with their established knowledge and experience in order to retain and transfer new learning. Assistance, by way of example, may be necessary to facilitate this process.

- Adults may at times be rigid in their thinking, resisting new ideas because of fixed habits and patterns of thought. They must be "unfrozen" from their preconceptions if learning is to take place.

Questions What benefits from experiential learning are suggested by these implications? Do you agree or disagree?

Questions What role, if any, does experiential learning currently play in the courses you teach? In your institution overall? What instructional modifications and resources are required to facilitate experiential learning?

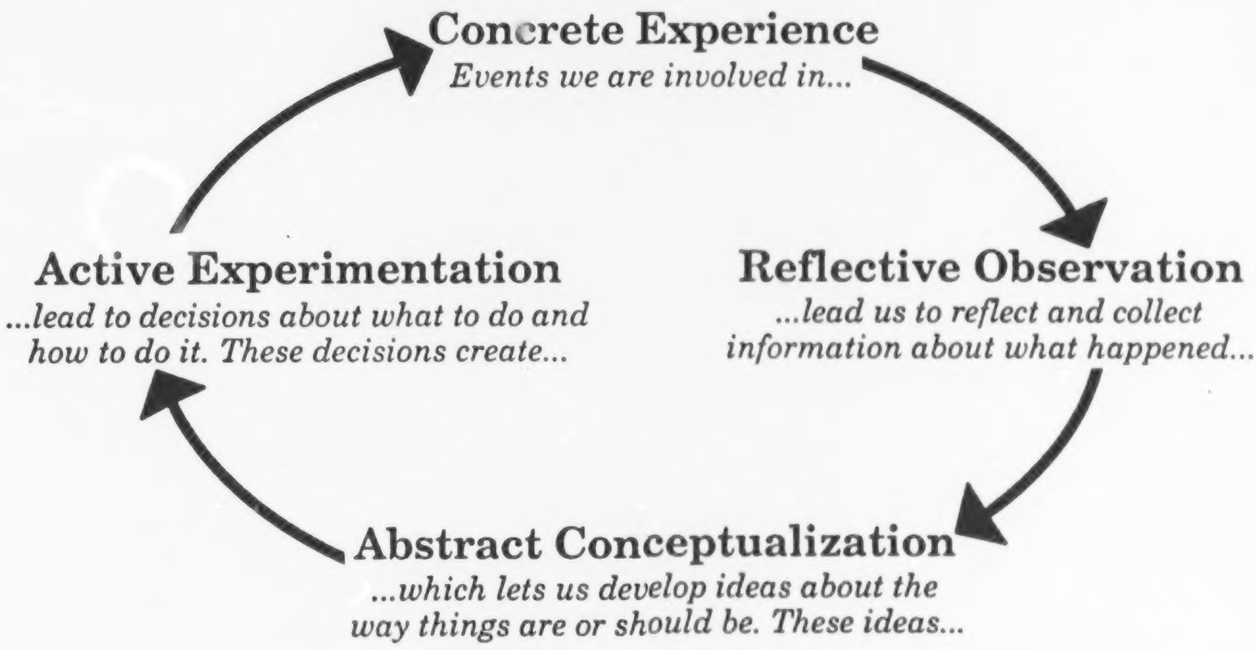
> *Happenings become experiences when they are digested, when they are reflected on, related to general patterns, and synthesized.*
>
> Saul Alinsky, *Rules for Radicals*

A Model for Experiential Learning

Description

David Kolb (1984) is credited with formulating contemporary experiential learning theory (ELT), a theory which has important implications for educators who teach or develop programs for adult learners. Kolb describes learning as "the process whereby knowledge is created through the transformation of experience" (1984, p. 38). He draws on the work of Lewin, Piaget, and Dewey among others to explain this "transformation" process, where information is grasped through the processes of concrete experience or abstract conceptualization, then transformed through the processes of reflective observation and active experimentation. This cyclical process, where learning is continually refined through experience, is illustrated below.

FIGURE 9-1: KOLB'S EXPERIENTIAL LEARNING MODEL


Concrete Experience
Events we are involved in...
Reflective Observation
...lead us to reflect and collect information about what happened...
Abstract Conceptualization
...which lets us develop ideas about the way things are or should be. These ideas...
Active Experimentation
...lead to decisions about what to do and how to do it. These decisions create...

Article

The following article by Sheckley provides a more detailed description of Kolb's experiential learning model. Read the article, which is reprinted at the end of the module. Then return to this page and answer the questions that follow.

Sheckley, B. G. (1985-1986). Experiential learning and adult learners. *CAEL News.*

Questions

How would you evaluate Kolb's model in light of your knowledge and experience as an educator? Is it a plausible representation of the adult learning process? Why or why not?

Question

Recall that one of the corollaries of the Kolb model is that learning is a continuous process, not a fixed outcome. How do you reconcile this concept with the concepts of behavioral objectives and outcome competencies?

Application

Draw on your experience as an educator. What kinds of instructional activities would best develop the following cognitive processes in an adult learner?

Grasping through concrete experience:

Transforming through reflective observation:

Grasping through abstract conceptualization:

Transforming through active experimentation:

Applying Kolb's Model in the Academic Setting

Key Issues

According to Sheckley (1986), the relative mix of grasping and transforming processes in a given course or curriculum will vary with the prior experience and background of the learners (p. 4). For example, when adults have minimal experience in a particular field and limited knowledge of its content, the grasping of fundamental information and skills should be stressed. For adults who are both competent and knowledgeable in a particular discipline, it is important to increase awareness of the learners' operative assumptions and help them experiment with new theories or methods. The chart on the following page provides a guide for designing curriculum based on Kolb's model.

> *All of us poorly, lopsidedly, and wrongly learn from some experiences and not from others, because we do not know how to compensate for human frailties, how to frame the kinds of questions which can be asked about an experience to make it more meaningful, or how to look for connections and interrelationships which might be relevant to interpret experience.*
>
> Harry Miller, *Teaching and Learning in Adult Education*

FIGURE 9-2: RELATIVE GRASPING AND TRANSFORMING EMPHASES FOR LEARNERS BASED ON EXPERIENCE AND CURRICULUM CONTENT

	Related Life or Job Experience		
Specific Expereince	low	medium	high
low	90% Grasping 10% Transforming	85% Grasping 15% Transforming	70% Grasping 30% Transforming
medium	60% Grasping 40% Transforming	50% Grasping 50% Transforming	40% Grasping 60% Transforming
high	30% Grasping 70% Transforming	15% Grasping 85% Transforming	10% Grasping 90% Transforming

Sheckley, B. G. (1986). *Adult Experiential Learning: A Grasping and Transforming Process.* Unpublished manuscript.

Application

Refer to the chart on the previous page. What would be the relative mix of grasping and transforming activities for a group of adult learners who were highly experienced in their profession, but lacked a specific skill?

What would be the mix of activities for adult learners who were technically competent in a particular area, but had little experience in managing or teaching in that area?

Questions

Do the courses you teach provide students with a balance of grasping and transforming activities, or do you tend to emphasize one or more types of activities over others? Where do you think most traditional instruction tends to fall on the chart?

Question

What kinds of factors might influence the relative mix of grasping or transforming activities in your program or course?

Examples

Experiential learning can be applied in a variety of instructional contexts. At the institutional level, the establishment of prior learning assessment programs provides a mechanism for awarding traditional credit for relevant experience gained in non-academic pursuits. These programs are described in Module 5. The Council for the Advancement of Experiential Learning (CAEL) in 1977 conducted a survey of institutions of higher learning to determine the range of experiential learning programs offered. Over three-fourths of the CAEL member institutions and two-thirds of the non-member institutions offered at least one of the following types of programs (Keeton & Tate, 1978, p. 11, 12):

- *Career Exploration*: Supervised placement in business, government, a service organization, or a profession in order to analyze career possibilities and to develop employment-related skills.

- *Career or Occupational Development*: Placement chosen by the student, in consultation with an adviser, to provide advancement in skills and experience related to a specific career.

- *Cooperative Education*: Classroom experience integrated with practical work experience in industrial, business, government, or service organizations in the community. The placement is an essential element in the educative process in that some minimum amount of work experience and minimum standard of successful performance on the job are included in the institution's degree requirements.

- *Pre-professional Training*: Service in assigned responsibilities under the supervision of a professional in education, medicine, law, social work, nursing, or the ministry, in order to apply the theories and knowledge learned in the classroom.

- *Public Service Internship*: Service in an appropriate institution for a specific period of time.

- *Social or Political Action through Service Learning Internship*: Placement, under faculty sponsorship, that provides an opportunity for students to work for change, either through community organizing, political activity, or research/action projects.

- *Personal Growth and Development*: A program in an off-campus setting that is designed to further personal growth and development, such as the wilderness survival programs, apprenticeship to an artist or craftsman, or participation in a group psychological or human relations program.

- *Cross-Cultural Experience*: Involvement in another culture or subculture in the United States or abroad, either as a temporary member of a family, a worker in that society, or a volunteer in a social agency.

- *Field Research*: An independent or group research project in the field, supervised by a faculty member, in which the concepts and methods of an academic discipline are applied.

Experiential learning can also be applied at the instructional level through the design of course activities that both provide and build on student experience. Some of these activities include:

- Daily journals or learning logs.
- Simulations-in-basket, role play, computer-based.
- Observation and interview.
- Dialogue--issues, beliefs, experiences.
- Writing--sketches, metaphors, autobiographical vignettes.
- Field trips.
- Analysis of primary documents.
- Laboratory activities.

It is important to realize that experiential activities such as these can be applied not only in professional and vocational studies, but also in the academic disciplines as well. Chickering (1976, pp. 100-107) draws on the work of Collier, Wilson, and Tomlinson to illustrate how the above experiential activities can be used to facilitate moral and ethical development in the fields of philosophy, literature, drama, history, and science.

Article

The following article describes a procedure for developing experientially-based learning activities. The procedure is a modification of the systems approach to instructional development. Read this article, reprinted at the end of the module. Then return to this page and answer the questions that follow.

Dean, R. L., & Gilley, J. W. (1986, April). A production model for experiential learning. *Performance and Instruction.*

Question

Citing the work of Goodstein and Pfeiffer, the article describes four processes -- experiencing, publishing, generalizing, and applying -- that should be incorporated into good experiential learning packages. How do these four processes relate to Kolb's experiential learning modes?

Questions

Recall an experiential activity that you participated in or developed. In what way did it reflect the design principles you read about? In light of what you have learned in this module, how might you improve on similar activities in the future?

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Experiential Learning and Adult Learners

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28

EXPERIENTIAL LEARNING AND ADULT LEARNERS

"Learning styles describe habits of nonlearning." David Kolb's seemingly contradictory assertion at last year's National Assembly still haunts me. Learning styles, as I understood them, provided a fundamental rationale for improved adult learner services, since adults, when allowed to use individual learning preferences, could learn more efficiently. Calling them "habits of nonlearning" made me rethink the whole notion of experiential learning theory (Kolb, 1984). My deliberations led to a greater appreciation of experiential learning theory and its potential as a framework for improving adult learner programs.

Kolb insightfully extends and clarifies the definition of experiential learning. Roots of experiential learning theory exist in the works of Lewin (e.g., learning derives from here-and-now concrete experiences and feedback processes), Dewey (e.g., learning is a dialectic process integrating experience and concepts) and Piaget (e.g., learning is a process of accommodating concepts to experience and assimilating experiences into existing concepts). Other definitions describe experiential learning as learning which occurs outside the classroom (e.g., Coleman, 1976), as a process that assesses extra-classroom learning in terms of traditional academic credit (e.g., Kirkwood, 1976), as a type of learning where changes in knowledge or skills result from living through an event (e.g., Chickering, 1976), and as a condition where the referent of the learning is at hand (Keeton & Tate, 1978). David Kolb synthesizes these many ideas into a radical notion that experiential learning is a "process whereby knowledge is created through the transformation of experience" (1984, p.38). Kolb's ideas have important implications for adult learning programs.

First, experiential learning theory (Kolb, 1984) shifts emphasis of adult learning programs from memorizing a body of knowledge to stimulating inquiry and skill in the process of knowledge getting. Kolb describes learning as a process, not as an outcome. He frankly states that viewing learning as an outcome with static attributes can be a definition on nonlearning since failure to modify ideas and habits as a result of experience is maladaptive. Experiential learning theory counters empiricist and behaviorist notions that constant, fixed elements (e.g., mental atoms, habits), form our varying patterns of thought. According to Kolb, ideas are not fixed or immutable elements of thought since they are formed and reformed through experience. "No two thoughts are ever the same since experience always intervenes" (1984, p.26). Kolb's thoughtful analysis concludes that it seems impossible to conceive of learning as the amount of fixed ideas a person has accumulated.

Second, experiential learning theory suggests that adult learning programs should concentrate as much on modifying and disposing old ideas as on implanting new ones. Kolb's (1984) model stresses that learning is a continuous process grounded in experience. Each experience contains elements of previous events which in turn influence future activities. Thus, he asserts that all learning is in fact relearning. Adults do not enter learning situations with blank minds; rather, through lifelong experiences, they have developed some articulate ideas about the learning at hand. To some degree, we are all psychologists, historians, or accountants. Much like T.G. Garp (Irving, 1979), we all develop working theories of how the world operates. Adult learning necessarily involves two processes: (a) integrating new ideas, facts and concepts into working theories; and, (b) substituting new concepts for established ones. Kolb points out that resistance to new ideas frequently stems from conflicts with old beliefs. Thus, examination of prior learning can become an essential element of adult learning curricula. "If the education process begins by bringing out the learner's beliefs and theories, examining and testing them, and then integrating the new, more refined ideas into the person's belief systems, the learning process will be facilitated" (1984, p.28).

Third, experiential learning theory implies that adult learning designs should involve both concrete experience and abstract concepts. The Kolb model (1984) describes a "double knowledge" theory in which adult learners come to understand the world through dialectically opposed processes of immediate experience (apprehension) and conceptual interpretation (comprehension). "Apprehension of immediate experience is an act of attention, valuing and affirmation, whereas critical comprehension of symbols is based on objectivity, ...dispassionate analysis and skepticism" (p.105). Apprehended sensations are known "instantaneously without need for rational inquiry or analytical confirmation" (p.43). Comprehensions, by providing symbolic representations of the world, summarize and order apprehended sensations and enable people to tell others about their experiences. Kolb asserts that the proper attitude for learning (i.e., the creation of knowledge) is a partial skepticism in which the knowledge of comprehension is held provisionally to be tested against apprehensions and vice versa" (p.109). He notes that recent research on left-brain and right-brain functions reinforce "...the conclusion that the two hemispheres of the brain were specialized for ...the two different modes of knowing about the world we are calling apprehension and comprehension" (p.48). The "double knowledge" emphasis of experiential learning theory argues that concrete apprehension processes (e.g., intuition, synthesis, spatial representation) can reverse what Bogden (1975) criticizes as a dominant American educational emphasis on comprehension processes (e.g., analysis, abstraction, symbolic representation, etc.).

Finally, experiential learning theory suggests that adult learning is an active process which involves: (a) grasping information (via apprehension and comprehension); and, (b) transforming information through internal reflection or external action. For example, nursing students armed with a comprehension

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that blood pressure readings must be taken before giving certain medications to patients and the apprehension of taking blood pressures before administering medications, have not fully learned how to administer medications. The students must transform the apprehensions and comprehensions by actively experimenting within the limited time reality of a hospital unit and internally reflecting on the consequences of any "shortcuts" they may have employed. "Learning, the creation of knowledge and meaning, occurs through the active extension and grounding of ideas and experiences in the external world and through internal reflection about the attributes of these experiences and ideas" (p.52). Traditional education programs tend to emphasize acquisition processes and sometimes ignore transformation.

David Kolb's (1984) comprehensive experiential learning theory is more than an argument for prior learning assessment, hands on learning opportunities, or individual learning style options. It is a rich framework which insightfully depicts learning as an active process of grasping and transforming information. Next month, I will use the grasping-transforming process to discuss learning styles as habits of nonlearning.

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A Production Model for Experiential Learning

Robert L. Dean & Jerry W. Gilley

The learning process is the primary focus of study in education. Several theories have been advanced which attempt to explain how learning takes place and, especially, how learning experiences can be facilitated and designed. A common area of agreement in most learning theory is that experience is of value. Therefore, a practical model, based upon previous research, can be designed which educators may use in determining the appropriateness, the design and the production of experiential exercises.

Adult educators and instructors at many other levels of learning seldom use experientially-based techniques. Many prefer to expose learners to knowledge using such traditional content-oriented techniques as the lecture. They perceive their role as disseminating information. Most educators do not use experiential exercises for three reasons: (1) they do not know when it is appropriate to use exercises, (2) they do not know how to plan and design an exercise, and (3) they are unsure about how to achieve closure following an exercise. Others do not include experiential techniques simply because they do not know what the exercises are or recognize their value in instruction. Many do not recognize experiential learning as a valid method of formal instruction because they received training only in traditional, content-oriented approaches. Others recognize the value of the experiential approach, but they lack the vigor to expend the needed energy in the design and presentation of experiential exercises.

Before experiential exercises can be designed it is important to understand what experience is. Applied in contrasting contexts, experience has two distinct meanings. First, experience is the sum of activities and events which have influenced a biological lifespan. According to Lindeman (1926, p. 9), experience is of the highest value in adult education. It is the adult learners' "living textbook."

Stern (1960, p. 71) noted differences between adults and young undergraduates in the same classes. He found that adults perceived themselves as "cramped by tedium" and felt insufficiently challenged by "customary undergraduate assignments." Long (1983, p. 223) described the value of experience as part of an adult education process. In perspective, "adult learners have experienced some learning" and "all adults have some experiences that may be related to their learning."

Educators of younger learners can also apply adult education philosophy. Just as adults have acquired knowledge through experience, younger students, too, can learn from experience. And even though young people have experienced less, they too can draw on their experiences to help formulate ideas and concepts which can be made more meaningful through experiential learning techniques.

Thus, in an isolated context, experience may be recognized as a single event or activity in which learning takes place. Experience is a technique or methodology that can be used by educators to transmit knowledge and to apply that knowledge. Dewey (1938, pp. 5-6) argued that experience is the central concept in his principle of education. "All genuine education comes about through experience . . . The central problem of an education based on experience is to select the kind of present experiences that live fruitfully and creatively in subsequent experiences."

The implications of experience as a method of instruction become important for educators, especially adult educators, as we examine further Dewey's concept. Knowles (1978, p. 123), in considering the value of experience, includes an experiential exercise in his "learning-how-to-learn" activity. This activity, which is experientially-based, is the primary facilitating tool in promoting the self-directed learning process.

An instructor who considers using experiential exercises must also recognize that they require much thought and planning because the method does not present merely a single activity. Steinaker and Bell (1979, p. 9) have proposed that an experiential exercise is a process, "a hierarchy of stimuli, interaction, activity, and response within a scope of sequentially related events." Goodstein and Pfeiffer (1983, p. 3) concur, describing such activities as "structured experience" which occurs in the framework of a cycle. They contend that the experiential learning cycle is composed of five stages: (1) experiencing, (2) publishing, (3) processing, (4) generalizing and (5) applying.

Steinaker and Bell (1979) have applied their concept of experiential learning as a process in their development of a taxonomy. Their five stage taxonomy explains what activities must occur in the learning process. The taxonomy is presented sequentially and requires the learner to proceed through each stage.

Briefly, the taxonomy begins with the exposure to the activity. Learning begins as the participant becomes consciously aware of the exercise. Exposure is sensory in nature and requires acceptance or rejection of the exercise. In essence, exposure is the invitation to the experience. The second stage is participation, the actual decision to become a physical and mental part of the activity. The third stage is identification. At this stage the learner and the projected idea(s) are integrated in an emotional context. The fourth stage is internalizing. At this point the experience begins to affect the lifestyle of the participant. The last stage is dissemination, the sharing of the learned idea with others.

If instructors consider the role of the learner in respect to Steinaker and Bell's taxonomy and Goodstein and Pfeiffer's learning cycle, the student becomes the resource, presenter, demonstrator, motivator, and even critic. If we recognize the learner's total involvement in the learning experience, the value of experiential exercises is made clearer. To emphasize this value a comparison with traditional, content-oriented learning methods is appropriate.

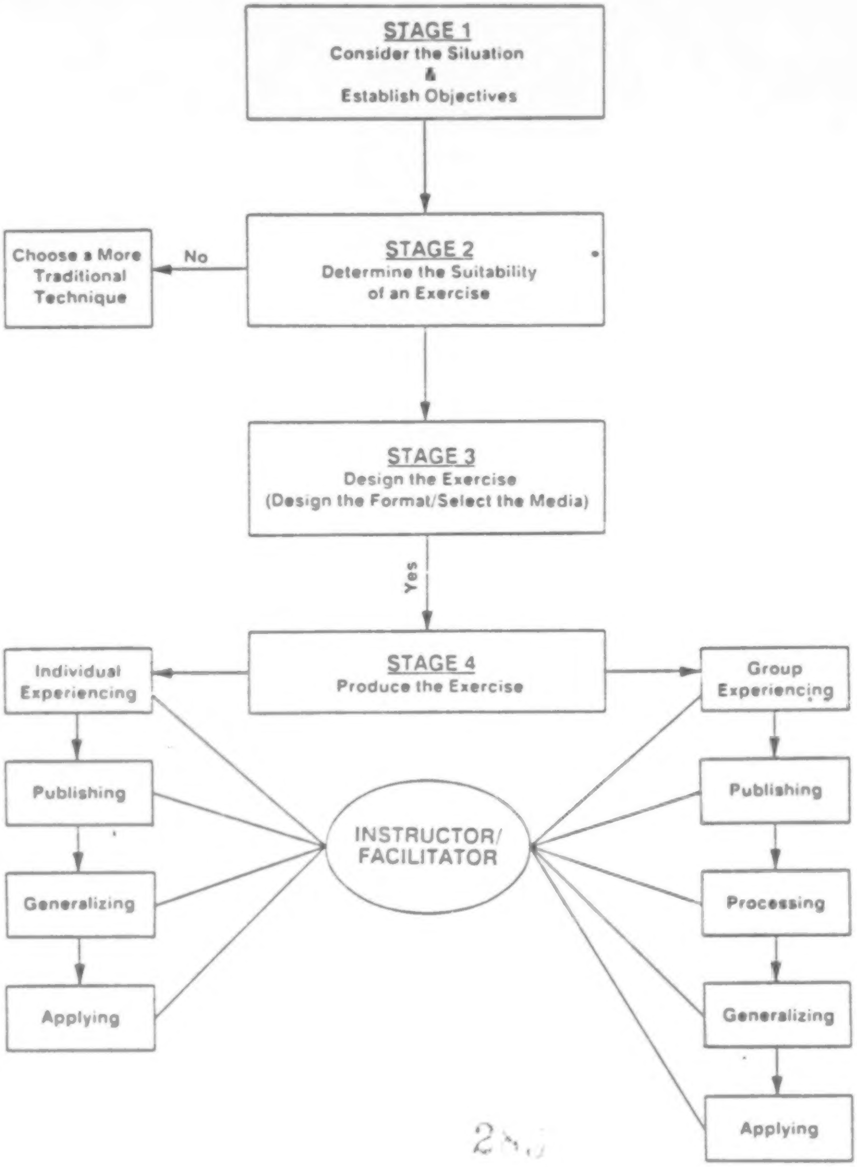
According to Knowles (1978, p. 176),

traditional methods, such as lecturing, condition the learner to respond or react to the instructor's stimuli. In his words, "the initiative in the transaction is almost wholly in the teacher; the role of the student is to react." Reactive learning sets limits to the learning process and places the learner in a dependent role. In experiential learning, the student is actively involved in the learning process. Boundaries may be set by the learner, and a degree of independent response and interaction is required.

Drawing from instructional design concepts by Thiagarajan (1980) and incorporating Steinaker and Bell's taxonomy and Goodstein and Pfeiffer's learning cycle components, a model can be constructed which instructors may use as a reference to determine the appropriateness of conducting an experiential exercise, to design its content, and to guide the exercise through all phases of production and presentation. The model is an appropriate instructional tool which results in meaningful learning for students and is a guide for the teacher who seeks to expand skills and become a total instructor.

If we examine the model (see Figure 1), we see that the initial stage requires the instructor to consider the environmental situation and, especially, estab-

Figure 1. A Model for the Selection, Design, and use of Experiential Exercises


STAGE 1
Consider the Situation
&
Establish Objectives
STAGE 2
Determine the Suitability of an Exercise
No
Choose a More Traditional Technique
STAGE 3
Design the Exercise
(Design the Format/Select the Media)
Yes
STAGE 4
Produce the Exercise
Individual Experiencing
Publishing
Generalizing
Applying
INSTRUCTOR/ FACILITATOR
Group Experiencing
Publishing
Processing
Generalizing
Applying

lish learning objectives. Obviously, a purpose must be established for conducting any learning activity. Objectives describe that purpose.

Thiagarajan (1980, p. 38) has suggested that experiential exercises are appropriate for five specific learning objectives: (1) To develop highly complex cognitive skills such as decision-making, evaluating and synthesizing, (2) To positively impact on the learners' values, beliefs or attitudes, (3) To induce empathy (understanding), (4) To sharpen human relations interactive skills such as interpersonal communication skills, and (5) To unlearn negative attitudes or behaviors. The learning objectives that are established should be specific and achievable. If they fall into any of the five preceding categories, the instructor should consider the second stage of the model.

Stage Two is a decision-making stage. The instructor must consider the objectives and nine other criteria before actually deciding to develop and produce an experiential exercise. If the criteria and objectives suggest that an experiential exercise is not appropriate, more traditional, cognitive-oriented teaching approaches should be used. An instructor should consider the following criteria and objectives in making that decision: (1) Does the class size pose constraints? (2) Is there enough time to present the exercise and complete the cycle of learning? (3) Is the physical setting appropriate? 4) Are any materials needed, and if so are they readily available at an acceptable cost? (5) Is the quantity of information to be acquired and processed by learners too great? (6) Is the instructor confident and skilled in conducting experiential exercises? (7) Does the instructor have sufficient time to thoroughly plan an experiential learning package? (8) Are the learners mature enough to participate and actively learn? and (9) Does the exercise pose conflicts of an ethical nature? After considering these elements, if a decision is reached to produce the exercise, the instructor should proceed to Stage Three.

Stage Three is the designing of the exercise. This is the planning stage. Instructors should consider two elements in the actual design of the activity. Instructors should design a format. There they should determine the means of transmitting that format, that is, select the appropriate medium.

Designing the format is perhaps the most time-demanding activity of the instructor. It is the component most often short-circuited by instructors. But its importance must be emphasized. To make designing easier, it is appropriate to borrow an outline of a design format introduced by Thiagarajan (1978). The format should contain four elements: (1) statement of specific objectives, (2) description of the materials needed, (3) description of the procedures to be followed in the activity, and (4) analysis or explanation of why the procedures and materials were used.

Perhaps the most time-consuming of the format elements is describing the procedures. The procedures should identify the information which will be presented, identify tasks to be assigned, give clear instructions, assign individual roles, establish time constraints, and describe the prompting techniques for the cycles described in Stage Four of the model. Finally, the procedures section should explain the evaluation and feedback techniques which the instructor will use.

The final stage is actually conducting the exercise. The model is designed to assure that all aspects of the learning package concept will be included sequentially. Stage Four continues sequentially.

The model is designed for an individual learner or a group of learners. The exercise requires that five elements of Goodstein and Pfeiffer's experiential learning package be incorporated for groups, and four elements be included for individuals. Briefly, the group cycle requires these five elements: (1) experiencing (doing the activity), (2) publishing (sharing reactions, observations, and emotions from the activity), (3) processing (discussing the group dynamics which occurred during the activity), (4) generalizing (inferring principles from the activity which relate to the real world), and (5) applying (planning more effective behavior for actual use in the real world). Since the individual learner is not involved in any group interaction, the third element (processing) in the cycle has been omitted from the model for individual learning.

During the learning activity the instructor's role is not passive. The instructor facilitates the interaction and guides the learner(s) in each element of the learning cycle. According to Steinaker and Bell (1979, p. 33), the instructor acts as the catalyst at the exposure stage. "The learner's acceptance of the teacher's guidance through the experience is now more crucial than before, since it begins to involve changes in behavior and in the perception of what is right for the individual."

Summary

It is important for instructors to understand that a meaningful experiential exercise contains each of the elements in the model. The model should motivate exploration into the world of experiential learning by those who now avoid the technique, and it should provide clear guidance to instructors who are looking for a systematic approach to the selection, design and use of experiential exercises. Adopting experiential exercises as one approach to learning will help instructors become better equipped to handle the educational challenges of the present and future.

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Module 10

Effective Strategies for Teaching Adults

– An Adult's View of the Exemplary Teacher
– Getting to Know Adult Learners
– Motivating Adults to Learn
– Adult Learning and Course Design
– Interacting with Adult Learners
–References
– Reprints

Effective Strategies for Teaching Adults

Preview

Imagine yourself in a classroom, facing a group of students who are as old or older than you are. You know that there is a lot of experience out there, and some high expectations tempered with a little trepidation. How are you going to relate to these learners? How will you establish rapport and create an atmosphere that facilitates learning? How can you help each and every one of them meet their individual developmental goals, while still encouraging a collaborative spirit?

Module 10 examines these important questions and provides some guidelines for developing and implementing instruction for adults. You will explore the teaching-learning process from the adult's perspective, and survey creative techniques for bridging the gap between new learning and prior experience.

Goals

In this module you are invited to:

- Evaluate your own teaching practice in light of adult learner perceptions of exemplary instructors and the learning environment
- Explore the different ways in which adults learn and how learning can be enhanced through recognition of these differences
- Identify strategies for motivating adults to learn
- Identify learning activities that enhance participation and interaction among adult learners
- Develop strategies for improving teacher-learner interactions in an adult learner environment

An Adult's View of the Exemplary Teacher

Key Issues

Many of the factors associated with the effective instruction of children and adolescents also apply to the adult learner. Empirical studies of traditional-age college students (Alciatore and Alciatore, 1979, Duncan and Barnes, 1986) consistently identify common attributes shared by exemplary teachers. Armistead, Fowler, Barksdale and Reif (1987), for example, delineate the following characteristics:

- Effective instructors have an infectious enthusiasm for the subject that they teach
- They state clear objectives, present material systematically, and summarize or emphasize major premises
- They stimulate interest in the subject matter through learning activities which are entertaining, motivating, and thought-provoking
- They have an expert's grasp of the course content and its nuances

Based on his review of literature related to humanistic psychology, Apps (1981) concluded that exemplary instructors of adult learners:

- *Are more concerned about learners than about things and events*
- *Know their subject matter*
- *Relate theory to practice and their own field to other fields*
- *Are confident as instructors*

- *Are open to a wide variety of teaching approaches*
- *Share their whole person*
- *Encourage learning outcomes that go beyond course objectives*
- *Create a positive atmosphere for learning*

A recent study by Sheckley (1987) identified those factors that significantly differentiated the best from the worst classroom learning experiences of adults. These factors relate not only to the qualities of the instructor, but to the nature of the overall learning environment as well.

TABLE 10-1: BEST AND WORST CLASSROOM EXPERIENCES

Item	Rank	% of Total Variance
STUDENT CHARACTERISTICS		16%
Grade received	1	
Level of personal resources available for learning	2	
TEACHER STYLE/TECHNIQUES		91%
Made course exciting	1	
Summarized major points	2	
Made difficult topics easy to understand	3	
Related to students as partners in learning	4	
TEACHER COGNITIVE/AFFECTIVE EMPHASIS		78%
Increased appreciation for subject matter	1	
Sensitive to response of class	2	
Had command of subject matter	3	
Seemed to lack personal fulfillment	4	
EXAMINATIONS		49%
Grade reflected my knowledge in course	1	
Kept students well-informed of academic progress	2	
Had instructional value	3	
LEARNING ACTIVITIES		77%
Were interesting	1	
Welcomed class discussion	2	
Related topics to students' lives and experiences	3	

LEARNING ENVIRONMENT		71%
Promoted student interactions	1	
Accepted errors as natural part of learning process	2	
Distractions and interruptions were not present	3	
Instructional aids were easy to see and hear	4	
Students were not devalued on the basis of gender	5	

Questions How would you evaluate your teaching style in light of the criteria described by Sheckley? Does your style fit the model of effective teaching as perceived by adults?

Question What behaviors could you refine or develop that would make you more effective in teaching adults?

Key Issues

As you have already seen, both younger and older learners prefer instructors who are student-oriented. Just what does the concept of "student-oriented" mean? And how can it be implemented in the classroom?

On the most basic level, instructors who are student-oriented are sensitive to the individual needs of each and every learner. In the case of adult learners, these needs can be as diverse as the adult population itself. As you discovered in Modules 2 and 3, each adult learner comes into the academic setting with his or her own unique blend of professional expectations, developmental needs and logistical barriers.

Article

The following article by Mary Jane Even discusses how these various needs combine and contribute to the phenomenon of learning style and the learning readiness of each adult. She suggests that the recognition of this individual "baggage," as well as a basic understanding of how adults learn, can help teachers facilitate new learning. The article is reprinted at the end of the module.

Even, M. J. (1987). Why adults learn in different ways. *Lifelong learning.*

Question

How do individual "baggage barriers" affect the adult's ability to learn new ideas?

Question

What can the instructor do to identify and accommodate these individual baggage barriers?

Motivating Adults to Learn

Key Issues

Learning has been described as an interaction between content and three individual learner factors: (1) general intellectual ability, (2) prior knowledge and experience, and (3) the motivation to learn. Instructors can do little to change general ability, and they have even less control over the prior knowledge and experience of adult learners. This leaves the motivational component as the only one of the three which lends itself to instructor intervention.

Consistently, exemplary instructors are described as those who are able to motivate students through their own personal enthusiasm in the subject matter they teach. With adult students, the instructor must also be able to recognize those issues that are personally meaningful to the individual learner, so that the subject matter can be presented in a way that is relevant to his or her needs.

Article

The following article describes the various components of motivation and how they can be manipulated throughout the teaching-learning process to promote learning among adults. Read this article, which is reprinted at the end of the module. Then return to this page and answer the questions that follow.

Wlodkowski, R. J. (1985, November). How to plan motivational strategies for adult instruction. *Performance and Instruction Journal.*

Question

What are some of the strategies you currently use to increase student motivation?

Application

Wlodkowski describes six factors that can be manipulated to increase the motivation to learn among adults. What are some specific strategies you could use to enhance motivation in each of these categories?

Attitude:

Need:

Stimulation:

Affect:

Competence:

Reinforcement:

Key Issues

Another common thread that can be seen in adult perceptions of the teaching-learning process relates to course structure and the types of instructional activities in which adults participate. Most adults favor courses in which the goals are clearly stated, and instruction is systematically provided to help them achieve those goals. They appreciate learning activities that are both varied and stimulating, and involve a high degree of participation.

Jones and Woodcock (1985) delineate the implications of adult learning principles for course design and implementation. These implications are illustrated in Table 10-2. In addition to these general principles, specific learning activities can be identified which promote interaction and participation among adult learners.

The emphasis on interaction and participation in the adult learning environment requires that instructors re-examine traditional educational practices such as the lecture. While the lecture remains an essential part of the classroom, it can be modified and combined with other kinds of activities to enhance adult learning.

Article

In the following article, authors Sorcinelli and Sorcinelli provide some suggestions for modifying the lecture for adult learners. This article is reprinted at the end of the module.

Sorcinelli, G., and Sorcinelli, M.D. (1987). The lecture in an adult education environment: Teaching strategies. *Lifelong learning.*

Questions

Which of the suggestions made by the authors do you find particularly relevant? How could you implement these ideas in your own practice setting?

TABLE 10-2: PRINCIPALS OF ADULT LEARNING AND COURSE DESIGN

Learning Principals	Implications for Course Design
The adult is a partner with the instructor in the learning process	Participants should actively influence the learning approach
Adults are capable of taking responsibility for their own learning	Incorporate self-directed learning activities in the course design
Adult learners gain through two-way communication	Avoid over-use of lectures and "talking to," emphasize discussion
Adults learn through reflection on their and others' experience	Use interactive methods such as case studies, role playing, etc.
Adults learn what they perceive to be useful in their life situations	Make the content and materials closely fit assessed needs
Adults' attention spans are a function of their interest and experience	Allow plenty of time to process the learning activities
Adults are most receptive to instruction that is clearly related to problems they face daily	Include applications planning in each learning activity
Adults learn best when they are being treated with respect	Promote giving inquiry into problems and affirm the experience of participants
Adults do not typically see themselves as learners	Give participants a rationale for becoming involved and provide opportunities for success
Adults learn better in a climate that is informal and personal	Promote getting acquainted and interpersonal linkages
Adult learners apply learning that they have been influential in planning	Diagnose and prioritize learning needs and preferences during the course as well as before
Adults learn when they feel supported in experimenting with new ideas and skills	Use learning groups as "home bases" for participants

Adults are likely to have somewhat fixed points of view that make them closed to new ways of thinking and behaving	Include interpersonal feedback exercises and opportunities to experiment
Adults learn to react to the differential status of members of the group	Use sub-groups to provide safety and readiness to engage in open interchange
Adults are internally motivated to develop increased effectiveness	Make all learner evaluation self-directed
Adults filter their learning through their value systems	Provide activities that focus on cognitive, affective and behavioral change

Jones, J.E., & Woodcock, M. (1985). *Manual of management development.*. Great Britain: Redwood Burn Limited. Reprinted with permission.

Key Issues

In the final analysis, it is the dynamic interaction among students and instructor that provides the catalyst for learning. Without the instructor's unique and personal contribution to the learning process, even a student-centered environment can become vacuous and mechanical.

Article

Stephen Brookfield focuses on those characteristics of the classroom environment that promote successful teacher-learner interaction and facilitate adult learning. His vision of this process is both realistic and encouraging for instructors who are committed to providing a quality educational experience for adult learners. Read this article, which is reprinted at the end of the module. Then answer the questions that follow.

Brookfield, S. D. (1988, Winter). Understanding and facilitating adult learning. *School Library Media Quarterly.* 16 (2).

Question

In his article, Brookfield's introduces the concept of "praxis." How does this process relate to Kolb's concept of adult learning as presented in Module 9?

Questions

Do you agree with Brookfield's contention that the development of critical reflection is a primary goal of the learning facilitator? Why or why not?

Question Why does Brookfield recommend using participatory learning methods with adults?

Questions How do your own teaching practices relate to those described by Brookfield? Do you ascribe to the operational approach or to the intrinsic approach?

Question How could you modify your current teaching practices to better accommodate the principles described in the article?

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By Mary Jane Even

Why adults learn in different ways

Introduction

The genesis of this article was in a request by students and colleagues of the Nebraska Adult Education Association to provide a workshop on learning differences among adults (Even, 1986). For many years I have been teaching psychology and instruction of adults and presumed that everyone recognizes that adults learn in different ways. I have come to recognize these presumptions and assumptions are not correct, thus this article which interprets why and how adults learn in different ways.

More specifically, the purpose of this article is three-fold: 1) to sensitize teachers to the difficult task of teaching adults; 2) to re-examine for long-time teachers components of the learning process that may have been forgotten, and 3) to give a prospectus for an adult learning theory and supportive instructional theory and strategies which enable teachers of many to reach every adult learner in the class.

Adult Learning and Teaching

Adult learning is very private while teaching is public. Learning is a private, personal, social-psychological response to that which is called teaching. It is the individual adult who has total command over whether anything is learned. Adult learning is voluntary in all its dimensions-participation, acquisition, and outcome.

Teaching is public because teacher classroom strategies serve more than one person at a time and are seen by many persons. Herein lies the problem. How can a teacher of many enable every person within a group to learn when they all learn differently? Teachers of adults should have "second thoughts" that their teaching can bring about learning. They continue to try, however, to a greater or lesser degree of effectiveness, to facilitate the learning process of adults while recognizing the hazards because they are committed to the potential results that each person may take from any specific learning opportunity those ideas, solutions, and assistance which will uniquely contribute to the life of the individual adult.

Adult Learner

The reasons why learning is so private can be found in the nature of the adult. Each person learns in a different way because each person has personal life experiences, neurological brain responses, style preferences, personality dimensions, resultant interests, predispositions to selected topics and approaches to work, to life, and to processes which generate individual interest and need. Learning is very personal and private because each person responds to and makes sense of new information, communication input, and ideas in a different way because of that which has developed within each person over time.

Teachers usually meet with students to engage in the teaching/learning interaction in a classroom or learning program developed on a specific topic for a specific purpose. However, this occurs only 10% of the time because adults engage in learning on their own 90% of the time (Tough, 1971, 1979).

When adult learners come to the learning program, they bring with them individual "baggage" which they carry around. For some this load is very heavy—for example, a sick child, no money, no job—and for others, the load is lighter—for example, freedom of time, feeling good about self, a lighter heart and spirit. As they come into the classroom, they bring that baggage, set it down on the table, and hide behind it. The baggage represents who they are, what they are, why they have come to this place, where they have been, and all the life experiences they have gathered until that moment. It is their personal armament and support. I have developed a name for these individual concerns entitled "Baggage Barriers."

The baggage of an adult's life contains all that the adult is, has been, and hopes to be as well as all that life means to them. It contains history, culture, values, attitudes, finances, philosophy, religion, hopes, dreams, sex, self concept, physical attributes, abilities, skills, knowledge, education, beliefs, and life experiences. It contains all that life and living have produced for that person.

More specifically, it contains those aspects of the nature of all adults and the unique ways each adult has dealt with life. I have summarized these Baggage Barriers into seven components which I perceive make up the nature of adults. Though they have been summarized, each component has multiple dimensions.

Each person has personal identifiers which are the basis upon which the individual personality has developed and are exhibited at that moment in the classroom. Each person is unique and

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at the center of his or her world.

Adult learners sit in front of the teacher who, in his or her mind's eye, can envision the individual baggage and the personal needs of each person. What makes a teacher believe that he or she can teach each of them and all of them? What is the basis upon which teaching in a classroom with many students takes place? Is there hope?

There is hope because we now have an understanding of what takes place when an adult learns and why each learns differently. Even though each person learns differently, we have found ways to break through the barriers to learning held by each person. We now have the knowledge to be more effective teachers of adults even though all adults learn in different ways.

Teacher Needs

There are some additional general principles which teachers need to remember when teaching:

1. Baggage Barriers. All the baggage which an individual learner has acts as a filter or screen before any communication can have an impact. In 1980 I began referring to it as the "baggage barrier."

2. Learned Disabilities. Adults may have learned personal strategies or developed personal styles which could block their learning ability. These can be referred to as "learned disabilities" because the preferences and predispositions to learning inhibit new ways, approaches, or strategies to learning and sometimes the content itself (Even, 1984).

3. Level of Intellectual and Perceptual Development. The level of intellectual and perceptual development that has been attained by the students will result in varying teacher approaches, ability of students to respond and divest themselves of predispositions and the resultant expectations of what will be attained. For example, working with teachers in a staff development program will be vastly different from working with learners who have not completed high school. This difference comes about not so much in what has been learned as the formerly learned ability to engage in relativistic thinking, problem solving, and transfer (Perry, 1970).

4. Nature and Level of Attainment. Throughout the learning process, and at issue whenever teaching occurs, are the kinds and levels of knowledge attitude or skill to be learned. For example, "learning of facts-understanding level thinking" is different from application level or analysis or integration or synthisis thinking (Bloom, 1965). The thinking processes of transfer learning conceptualization or perception are different also. What level of learning the teacher seeks has a relationship to the achievement of learning (Bigge, 1982).

5. Fluid and Crystallized Intelligence. Intellectual capabilities include the use of fluid intelligence and crystallized intelligence. Fluid intelligence is the naturalistic approach given by a person in a life situation to overcome a problem. It is instinctive and inherent for survival but can also involve high level activities such as planning, organizing, and transfer of information. Crystallized intelligence is that which results from the schooling process and is based on processes and knowledge learned. It has been said that as crystallized intelligence increases, fluid intelligence decreases (Cattell, 1963). This author does not support this premise. Rather she believes that both fluid and crystallized are used by adults throughout life. The more crystallized knowledge base acquired, the more a person may use it; but in adults this cannot be assumed.

6. Concrete to Abstract. Adjunct to the former statement, but separate from it, is the concept that generally adults prefer to receive concrete knowledge first and then will learn abstract concepts and theory in support of the practical/concrete ideas (Long, 1983).

7. Age and Ability. The aging process of adults may enhance or limit adult learning. Schaie and Geiwitz (1982) have demonstrated that at all ages adults can learn, but it may become slower as adults age. Physiologically the interplay of blood flow, adrenal glands, and brain fluid create a slow down in cognitive functioning as adults age. Awareness of these conditions may alert the teacher to provide enabling processes to adults needing more time to take tests or study content.

8. New Ideas Relate to Old Ideas. Adult learning is a process of personal differentiation, integration, and generalization of old ideas with new ideas to be learned (Even, 1981).

9. Locus of Control in Classroom. Awareness that students who come to a classroom perceive that the instructor will take about 55% control while the student has 45% control (Tough, 1982).

10. Motivation. The awareness that motivation to participate is only the beginning kind of motivation. In addition, motivation to hear, perceive, respond, show interest, and other levels of involvement during any class need to be part of the teacher strategies and concern. Never assume motivation at any time during the teaching/learning interaction.

Though there are other psychological, physical, intellectual, and sociological concepts which could contribute to this discussion, these 10 provide a backdrop upon which to analyze adult learning theory and instructional strategies.

Adult Learning Theory

Adult learning is a problem-solving process involving attention, differentiation, structuring, integration, abstraction, and generalization. Learning involves the retention of past, present, as well as future experiences. The theory is based upon sound psychological theory and has been experientially tested for 10 years by Boyd and Even (Boyd, 1968, 1981; Even 1981, 1984; Long 1983).

Three assumptions need to be made in the development of the learning process: about the "nature of man," about learning theory, and about the fact that adult education can draw from interdisciplinary contributions of knowledge. In regard to the nature of man, it is assumed philosophically that people have the capacity to change, have potential for making correct choices when in an interaction with their interdependent total field of experience, and that people in this interaciton can take responsibility for themselves and their own learning. They can make decisions that are correct, good, and appropriate on their own. It is assumed that these beliefs are the very reasons why adults can engage in learning and have it make a difference. It has roots in holistic, humane views of man or the "third" interaction model (Even, 1981).

In regard to learning theory and resultant instructional practice, it is assumed that adults learn through an interaction process, must be motivated from within, must have a share in deciding what is to be learned, and must set their own goals. All learning has cognitive, affective, and psychomotor dimensions, which simultaneously interact on the learning experience. Perceptions are based on former experience and the interaction with new learning and, thus, are holistic in form. Each individual views new learning from his or her own perspective and need. Adult learning theory has its roots in phenomenology, cognitive, or gestalt views of learning and is consistent with the interactive or holistic philosophy. This theory could be applied to all human learning, not just adult learning (Even, 1981).

In regard to interdisciplinary contributions to knowledge of adult learning, it is assumed that adult learning researchers believe that knowledge enhances the adult education field. Thus, knowledge from educational psychology, linguistics, psychology, human development, life span psychology, neurology, and neurophysiology apply and expand the knowledge of adult learning processes (Even, 1985).

To begin a specific analysis of adult learning, it is believed that learning is a problem solving process in which a new idea comes into the perception of an adult. The adult interacts with that idea mentally trying, or deciding not to try, to give the new idea a chance at entry into the memory. The adult makes a conscious decision to accept or reject each perceptual input. Learning is not ever all that new because there must be some way to relate new ideas to prior ideas. A whole new idea still needs to get a foothold in the mind based upon an old or prior idea. Sometimes learning is delayed or stopped for lack of information for ways to go about involving the mind in the processes of learning. Some adults, who recognize through prior learning a gap or hole in knowledge, are more motivated to delay the process of learning in order to wait for guidance. Other adults, because prior experience did not provide them either knowledge or ideas about how to process new ideas or the need to learn new ideas, will stop trying to perceive or hold interest in the new idea (Even, 1981).

Thus, adult learning is the nonpredictable response to the input of new ideas: learning occurs through the interaction of knowledge and experience which results in individual verbal, preverbal, and non-verbal responses. All new ideas are integrated with old ideas and, thus, nothing new is ever learned independent of other ideas.

Adult Learning on a New Idea

First, there is attention provided by the mind to a perceived new idea. This attention is elusive. If not held, the learning ends. If attention is held, it is due to selective interest by the learner on the idea. Selective interest is related to and bound by related thoughts from the retention system (memory) of a person no matter what form in which the idea comes packaged.

Second, there is a shift from initial attention to the differentiation on how the new idea relates in the memory to what is known by the learner. Since selective interest is based upon prior interest or ideas, there is a comparison analysis of the new idea to prior interests or ideas, with a poor match the learning ends. However, if the learner can relate or compare the new idea with prior ideas, the learner will continue to maintain selective interest in the new idea.

Third, maintaining selective interest through the differentiation stage is essential to the willingness of the learner to remain open to structuring (or third stage). Structuring entails finding a place for the new idea in the memory of prior experiences, since it has already been differentiated for its uniqueness or similarity to other ideas. If a "fit" or place for the idea cannot be found by the learner with or without the teacher's help, learning ends. Many times students keep asking questions to derive their own individual structuring of an idea. Whole new ideas have to be tentatively attached to similar, but not the same, ideas for a short time while more is learned upon which to build a new structure in the memory or retention system.

Fourth, if a place is found for the new idea in the memory (either temporary or permanent), then the learner remains open to begin the fourth stage of analyzing the idea more closely to see what the idea is really all about. If upon further scrutiny the idea loses its luster, learning ends. If upon analyzing the idea there is promise and reward, then an attempt is made to truly question the potential other uses or reasons to know the idea. Analyzing is a problem-solving process.

Fifth, if the idea has real promise or is helpful to the learner, the new idea is integrated with the memory permanently. But, if after closer examination and many attempts to find out why and how to use the idea, the new idea is burdensome, harder to fit into a previous experience than originally thought, and integration cannot take place easily, the learning ends.

Sixth, if the learner finds that the idea can easily fit and the integration occurs, then the learner begins to abstract on the potential other uses of the idea, both immediate uses and future uses.

Seventh, the uses of the idea become the probability or possibilities of the future memory needs and the idea becomes a part of the retention system to be acted upon or used again. This stage is called generalization (Even, 1981).

Instructional Theory

If the teacher of adults begins by responding philosophically and by intent, strategy, and style to the needs of each adult who has voluntarily chosen a classroom for the acquisition of new knowledge, the teacher will have begun the process of providing learning in response to individuals. Then, the teacher must get the attention of students by relating to the concrete, practical concerns of the students. This makes content problem-oriented. In addition, the teacher needs to find out specific information about students to use when using examples to explain content. This process will make the content more meaningful. Then, the teacher needs to provide a process whereby the students participate in the teaching and learning process. This enables the content to be more relevant.

Teacher strategies and style should permit a climate in which students are free to express their individual opinions about the content and trust that their opinions will be considered important, be acceptable, and treated with respect. This produces a climate in which the learner is free to learn. In addition, the teacher's processes should encourage each student to make decisions about what is to be learned. Students should receive some feedback on process in both written and verbal form which helps the learners determine their individual degree of achievement even though grades are not given.

Since it is known that adults learn in a nonpredictive manner, the personal thinking structure or the content may or may not be linear. In fact, personal learning has been described by Tough as in a "zig-zag" thinking structure with variable paths and channels as interaction with a content area takes place (1971). These structures are perceived by the learners to be appropriate and reasonable. Part of the reason why this tendency exists is the use made of fluid intelligence rather than the crystallized intelligence linear-problem-solving processes preferred by teachers.

Each person makes sense of information in different ways as the content is filtered through the Baggage Barriers of personal life experiences, interests, style, and needs. As the information is processed, adults integrate ideas with old knowledge to derive new insights. There are many areas of unique concern which the teacher must accommodate in the process and strategies of teaching. This can be achieved by those techniques suggested but also through use of alternative media and devices.

It is assumed that within these principles and concepts, it is possible for instructors to meet the needs of learners not only in content but also in learning process. Thus, an instructor who believes in the cognitive theory could use more directed instructional approaches without losing sight of or altering his or her learning theory or philosophy. The attitude toward the learner remains the same. Only the instructional techniques change to accommodate the learners. The use of computerized instruction, lecture, and instructor-directed readings, for example, are appropriate when a new learner asks for this kind of assistance. However, an instructor does not assume the "dictatorial" or "superior teacher" pose which another philosophy assumes. Even beginning (very low level) learners of various content areas can be involved in discussion very quickly as they recognize application of knowledge and wish to discuss it, thus providing more interaction and interpersonal learning approaches.

Each learner comes to the learning setting with various kinds and amounts of Baggage Barriers which result in differences in learning approaches and strategies. By moving "one level above" these differences in teaching strategies and using techniques and devices to accompany specific differences, the classroom teacher can overcome the barriers brought to the learning setting by the learners because of their differences.

It demands a belief that individuals will respond to attention getting techniques; that teachers will use a variety of examples and approaches to help students differentiate new from old knowledge. Teachers will assist, by various techniques, approaches, examples, and shared experiences, the students to structure the new knowledge. The students will be assisted to learn how to put ideas together through "modelling," or "ideas," techniques in order to integrate. The teacher will create vehicles in class for each person to talk, share, and make use of knowledge in classroom.

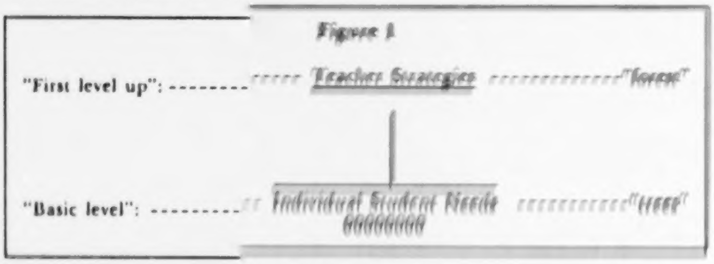


Figure 1

"First level up": Teacher Strategies "forest"
"Basic level": Individual Student Needs "trees"
[illegible]

Teachers cannot assume any skill has been learned. The ability to transfer must be carefully based upon ideas and forms which are part of the structure of the class and only then can transfer become a natural outcome of learning. Assuming that ideas will generate other ideas for transfer is an error. Only with clarification and ways to approach an idea generated by the teacher will the students recognize what to do with an idea. Then, all of a sudden, the idea belongs to them and they forget where they got it. This is a helping, facilitation role which teachers of adults need to carry out. This need for clarification is due to the large amount of information which each adult takes in each day and the volume of stored knowledge and experience which is retrievable. A teacher needs to help adults make some choices initially; but after that, the adult will make the selection and forget the teacher has said it.

The key to working with adults with a variety of differences is the use of a variety of examples, techniques, and approaches to accommodate the various alternatives of choices. A classroom agenda should represent a breadth of approaches. The notes of a teacher should include a variety of ideas for application, many examples of things they may already know, and numerous alternatives of ways to approach both the content and students because of those students who are being taught.

Examples, ideas, and alternatives become part of the teacher resource packet; and each teacher needs to work hard to build up and remember these resources. Experience, use of stereotypes, remembering what some students' needs were, and such, can assist the teacher. In addition, knowledge of brain processes, cognitive styles, locus of control models, age development and concerns, intelligence and learning ability of adults is vital in order to select techniques and strategies to accommodate all adult learners.

Teaching is hard work. It is not a "show and tell," a "tell and do," or "I talk-you listen" process. *Teaching is the process of facilitating an interaction for students between new content and their experience. It is a process of providing opportunities for the interaction to take place. It is very public.*

Conclusion

Adult learning is very private while teaching is public. This article has been written to sensitize teachers to the great task they face and to the problems which adult learning represents. It has provided a perspective for an adult learning theory and supportive instructional theory and strategies. It has provided a rationale to explain why and how adults learn in different ways. AAACE

How To Plan Motivational Strategies for Adult Instruction

Raymond J. Wlodkowski

As a concept, motivation is a bit of a beast. A powerfully influential and wide-ranging area of study in psychology, motivation at its core deals with *why people behave as they do*. But in terms of mutual understanding and tightly controlled boundaries of application, motivation roams the field of psychology with almost reckless abandon. There are over twenty internationally recognized theories of motivation with many opposing points of view, differing experimental approaches, and continuing disagreement over proper terminology and problems of definition (Madsen, 1974).

In the fields of instruction and learning this has led to some difficult problems—whom to believe, which theories to apply, and how to make sense out of this wealth of confusing possibilities. In general, instructors and trainers can find very few guidelines that suggest how to cohesively and consistently apply the most useful and practical elements from this extensive array of motivational information (Wlodkowski, 1981).

Although the available knowledge does not fit into any single theory of motivation, there are a significant number of well-researched motivational strategies that can be applied to learning situations according to motivational principles. One way to presently resolve this dilemma is to utilize general motivation factors that can incorporate useful strategies from a variety of motivational theories. For example, most motivational theories have something to contribute to the understanding of how human attitudes are formed and operate. Anyone who instructs knows the importance of learner attitudes as they influence motivation for learning. By using the major factor of attitude, the instructor can consider strategies from numerous theories of motivation to more positively influence the learner in the learning task. With this approach, motivational strategies from classical conditioning, operant conditioning, gestalt psychology, consistency theory, rational-emotive theory, and social influence theory are all possible means to enhance learner motivation because each of these theories has a set of principles and related research that deal with attitude change.

There appear to be at least six major factors that are supported by numerous theories of psychology and their related research as having a substantial impact on learner motivation—attitude, need, stimulation, affect, competence, and reinforcement. The following sections of this article will consider how each of these motivational factors is a powerful influence on adult behavior and learning as well as how these major factors can be combined when designing motivational strategies for instruction.

How Attitudes Influence Behavior

In general, an *attitude* is a combination of concepts, information, and emotions that results in a predisposition to respond favorably toward particular people, groups, ideas, events, or objects (Johnson, 1980). Attitudes are powerful influences on human behavior and learning because they help people to make sense of their world and give cues as to what behavior will be most helpful in dealing with that world. They give us guidelines and allow us to make our reactions more automatic. This makes life simpler and frees us to cope with the more unique and stressful elements of daily living.

Attitudes are learned. They are acquired through processes such as experience, direct instruction, identification, and role behavior (teacher-student, parent-child, employer-employee, and so forth). Because they are learned, they can also be modified and changed. New experiences constantly affect our attitudes, making them shift, intensify, weaken, or reverse. Attitudes can be personally helpful as in the case of positive self-esteem, or they can be personally harmful as in the case of intense fear of failure. Attitudes are with us all the time and they constantly influence our behavior and learning.

New learning is usually risky business; the outcome is seldom a certainty. For adults, this risk may be even higher because the new learning may be required for a job, a promotion, or some important personal goal. Attitudes are very active in unpredictable situations because of the security they provide for the person. An instructor of adults can be quite assured that their attitudes will be an active influence on their motivation to learn from the moment the instruction begins.

How Needs Promote Desire

A need is a condition experienced by the individual as an internal force that leads the person to move in the direction of a goal. The achievement of the goal is capable of releasing or ending the feeling of the need and its related tension. Thirst (a need) leads to a search for water (a goal). When enough water has been drunk, the need or tension of thirst is ended. Needs exist in the tissues and memory of human beings (Deci, 1980). They can be physiological, such as hunger, or learned, such as the need for achievement.

All people live with an unending sense of need. Which need a person is currently experiencing will depend on the individual's history of learning, the current situation, and the last need that was fulfilled. Some needs seem more dominant and continuous (for rest and safety), while others are less predictable (for understanding and orderliness). No single theorist in psychology has created a list of needs that are acceptable to most other psychologists. Yet no psychologist would deny the powerful influence of needs on human behavior. People actually can feel driven to acquire food, money, or knowledge, which are just a few of the many compelling needs that seem to motivate human beings.

Most often, needs act like strong internal feelings that push a person toward a general goal. The more strongly the person feels the need, the greater the chances the person will feel an accompanying pressure to attain the related goals. This tension or pressure can translate into a desire when the individual becomes aware of this feeling and wants to achieve a particular goal. A person feels hunger and a need for food (general goal). He desires to cook himself a gourmet meal (particular goal). Another person feels a bit lonely and needs some social company (general goal). He desires to call his best friend (particular goal). Accomplishing what one desires usually leads to satisfaction and enjoyment. It is what people want to do. When adults need and desire what they are learning, they will tend to be highly motivated. Instructors can influence motivation based on need by being sensitive to apparent needs and by formulating how and what they present to adult learners in a manner that gratifies those needs.

How Stimulation Maintains Attention

What is stimulation? Is it excitement, entertainment, or provocation? Sometimes it is. But frequently it is not. Stimulation is any change in our perception of or experience with our environment that makes us active. We see something more colorful and are attracted to it. We hear something new and listen more carefully to the sound. We touch something for the first time and we think about it for a while. A surprise jolts our emotions. All of these are stimulating experiences. They can be interesting, frustrating, invigorating, or irritating. Whatever their quality, they will get our attention and tend to keep us actively involved.

Human beings seek stimulation. There is considerable evidence that sensory stimulation is important to the development and maintenance of normal motivated behavior (Petri, 1981). It appears that stimulation increases the activity of the brain and keeps human beings aroused and alert to deal with their environments. Small or moderate changes in arousal are reinforcing to us and cause us to direct our attention toward these various forms of stimulation. As long as these changes such as novelty, uncertainty, and complexity continue, we continue to pay attention to them. Once these changes stop, we tend to become bored and explore in other directions to maintain our alertness.

Stimulation directly helps to sustain adult learning behavior. If a person does not pay attention to instruction, very little learning will take place. The instructional process and its related materials make up the main body of most learning activities. Adults can have a desire to learn something as well as a positive attitude toward it, but if they do not find the process of learning stimulating, their attention will diminish. People do not want to become bored but they become bored. Self-discipline and will power can only take concentration so far. A continually repetitive and uninteresting stimulus can wear down the best intentions of most people. Once boredom sets in, fatigue and distraction are not far behind. Being adults, we are more vulnerable to these two oppressors of learning because, unlike children for whom school may be their first priority, adults have other serious responsibilities and learning may be one more demand added on to an already stressful lifestyle. To be a stimulating instructor of adults is a great challenge and a real necessity.

How Affect Motivates Behavior

The major motivation factor of affect pertains to the emotional experience—the feelings, concerns, and passions—of the individual learner or group while learning. No learning takes place in an emotional vacuum. Learners feel something while learning, and these emotions can motivate their behavior in a number of different directions.

Some psychologists have proposed that emotions are the "chief movers" of behavior (Tomkins, 1970), and most psychologists accept the idea that thinking and feeling interact to mutually influence one another as well as to lead to changes in behavior. Every learning environment is constantly influenced by the normal emotional reactions of its participants. Also, because adult learning so often deals with success and failure in achievement and accomplishment activities, the personal feelings of these learners are continually rampant as they react to their progress or lack of it. The emotional state of an adult at a particular instance of learning is a significant influence. Ask any group of adult learners about how they *feel* about what they are doing and you will receive an indicator regarding their future involvement, perseverance, completion, or return to the learning activity.

The constant dynamic of thinking, feeling, and behaving is what puts vitality and humanity into the learning situation. Instructor and learner emotions give meaning and relevance to learning. Affect can be an intrinsic motivator. When emotions are positive while learning, they sustain involvement and deepen interest in the subject matter or activity. If reading fine literature fills a learner with wonder and joy, that learner will very likely want to read more of the same literature. Harmony between emotions and thinking, so that they can influence motivation to learn as a supportive integrated force, is in the best interest of effective instruction.

How Competence Builds Confidence

According to White (1959), human beings inherently desire to gain competence over their environment. Competence theory assumes that people naturally strive for effective interactions with their world. By virtue of being a human being, a person is intrinsically motivated to master the environment and finds successful mastery of tasks to be gratifying. We are genetically programmed to explore, perceive, think about, manipulate, and change our surroundings to promote an effective interaction with our environment.

In general learning situations, a sense of competence occurs when there is an awareness of personal mastery: the realization by the person that a specified degree of knowledge or level of performance has been attained that is acceptable by personal and/or social standards. This usually comes toward the end of the learning process when the person has had a chance to apply or practice what is being learned. When the person knows (usually through feedback) how well he can do what he is learning and can make internal statements, such as "I really understand this" or "I am doing this proficiently," feelings of competence will occur.

Once the person knows with some degree of certainty that he is able or adept at what he has learned, he will feel self-confident. This comes from the person's realization that he has intentionally mastered whatever has been learned through his own ability and effort. This self-confidence emanates from such internal statements as "I can do it" or "I will be able to do it again."

The relationship between competence and self-confidence is mutually advantageous. Competence allows confidence to develop, which leads to emotional support for effort to master new skills and knowledge. Competent achievement of this new learning further buttresses confidence, which can now again support and motivate more extensive learning. This can result in a spiralling dynamic where competence and confidence grow in continued support of one another. To personally feel assured that one's own ability and effort can eventually lead to new learning and achievement is a powerful and lasting motivational resource. It is also the mark of a true expert or champion in any field. Instructors can help learners to achieve this by emphasizing and establishing conditions for competent learning.

How Reinforcement Enhances Learning

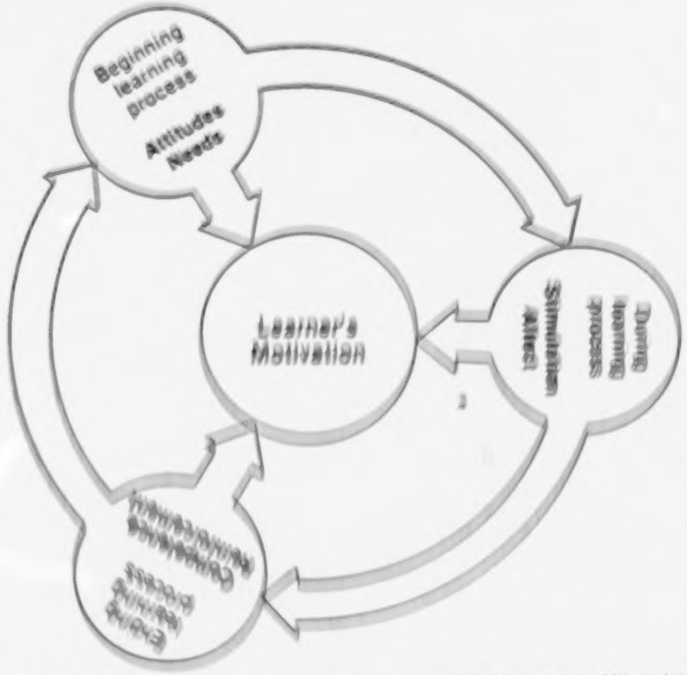
One of the most fundamental laws of psychology is the principle of reinforcement. Reinforcement is any event that maintains or increases the probability of the response it follows (Vargas, 1977). In countless studies with animals and humans, in laboratories, classrooms, and clinical settings, psychologists have found that behaviors can be made more or less likely through the judicious application of positive and negative reinforcement. *Positive reinforcement* happens when a behavior is followed by a presentation of a desired stimulus that increases the behavior's rate of occurrence (Alberto & Troutman, 1982). Positive reinforcers can be *tangible*, such as money and prizes, or they can be *social*, such as approval and affection. *Negative reinforcement* is the contingent removal or reduction of an aversive stimulus following a behavior that increases the future rate and/or probability of the behavior's occurrence. Penalties, disapproval, and threat often act as negative reinforcers. However, because negative reinforcement is an aversive approach to learning with many of the potential drawbacks of punishment, I evaluate this procedure as potentially too dangerous and do not advocate its use or application (Kazdin, 1980). In general, adults in this culture do not respond well when they know or feel their learning is coerced. Consequently, their motivation for learning under such conditions tends to diminish over time.

However, people do seem to study with greater effort and learn more effectively when their specific learning behaviors are *positively reinforced* by their instructors (Wlodkowski, 1982). Praise, high test scores, academic awards, and instructor attention have been educational incentives for many years. It is difficult to believe any learning setting could positively survive without them. Although recent studies have indicated that *how* these reinforcers are applied must be carefully qualified (Wlodkowski, 1985), research in adult learning and work continues to support their effective use (Korman, Greenhaus, & Badin, 1977; Pittman, Boggiano, & Ruble, 1983).

Organizing the Major Factors of Motivation for Maximum Usefulness

Finding a way to organize and combine the major factors of motivation so that they can effectively guide instructor selection and implementation of motivational strategies is what makes motivation planning possible. Instruction is systemic in nature. It is a network of interactions between an instructor and learners that leads to learning. Therefore, motivation planning has to be systemic as well. No single major factor, such as need, exists without somehow being related to the other fac-

Figure 1. The Time Continuum Model of Motivation



Copyright © 1978 by Raymond J. Wlodkowski, University of Wisconsin-Milwaukee tors, such as stimulation and competence. Learning activities are arranged in patterns or sequences that lead to the attainment of learning objectives. For example, learners listen to a lecture, which is followed by a discussion, which is followed by some problem solving based on the previous lecture and discussion. The learning objective is that the learner will correctly solve a certain kind of problem, and three learning activities were sequenced to reach this objective.

Every learning sequence, whether it lasts twenty minutes or twenty hours, can be divided according to a time continuum. There is always a beginning, a middle, and an end. There are effective things that can be done during each of these phases to enhance learner motivation. Each phase has a maximum potential for the employment of motivational strategies that can optimally influence the learner's motivation. Each phase also relates to the others in forming a dynamic whole that, when proper motivational strategies are applied according to their particular phase, enhances the overall learning experience and catalyzes the learner's positive return to the learning situation. The various learning activities that make up the sequence can be analyzed in terms of when they occur and which motivational strategies they can incorporate in order to maximize their motivational influence throughout the sequence. The Time Continuum Model of Motivation (Wlodkowski, 1981) organizes motivational strategies according to this rationale (see Figure 1).

In the Time Continuum Model of Motivation there are three critical periods in any learning sequence or process during which particular motivational strategies will have maximum impact on the learner's motivation.

1. *Beginning*. When the learner enters and starts the learning process.
2. *During*. When the learner is involved in the body or main content of the learning process.
3. *Ending*. When the learner is finishing or completing the learning process.

For each of these critical periods, there are two major factors of motivation that serve as categories for strategies that can be applied with maximum impact during those periods of time.

Beginning: *Attitudes*. The learner's attitudes toward the general learning environment, instructor, subject matter, and self.
Needs. The basic needs within the learner at the time of learning.

During: *Stimulation*. The stimulation processes affecting the learner via the learning experience.
Affect. The affective or emotional experience of the learner while learning.

Ending: *Competence*. The competence value for the learner that is a result of the learning behavior.
Reinforcement. The reinforcement value attached to the learning experience for the learner.

Using the Time Continuum Model of Motivation, each of the six major motivation factors can be understood or evaluated by the instructor to some degree in order to choose and sequence appropriate motivational strategies. The instructor can also use this model to diagnose motivational problems and to better understand the motivational potential possible in various learning sequences.

Although the Time Continuum Model of Motivation shows motivational influence in three separate phases because time is linear in its progression, the overall influence of the major motivation factors is probably more dynamic and constant. Also, the six major motivation factors are probably not equal in their motivational influence upon the learner. Each is quite powerful. Therefore, the instructor can plan motivational strategies for each factor so that a continuous and interactive motivational dynamic is organized for maximum effective instruction. *What is most critical is that each time phase* (beginning, during, and ending) *within the learning sequence includes significant positive motivational influence on the learner*. If any of these periods is motivationally vacant, learners will have difficulty sustaining their motivation for learning. This is analogous to nutrition for daily living. Most people eat three meals a day to sustain their energy. These meals usually correspond to beginning, during, and ending phases of their daily routine. Without such timely nutrition, their entire sequence of living habits can be disrupted. The six major motivation factors are selective sources for positive motivational influence, just as the major food groupings are selective sources for vitamins and protein. Thus, there are six basic questions to be considered by an instructor in the planning of any learning sequence or experience:

1. What can I do to establish a positive learner attitude for this learning sequence? (emphasis on beginning activities)
2. How do I best meet the needs of my learners through this learning sequence? (emphasis on beginning activities)
3. What about this learning sequence will continuously stimulate my learners? (emphasis on main activities)
4. How is the affective experience and emotional climate for this learning sequence positive for learners? (emphasis on main activities)
5. How does this learning sequence increase or affirm learner feelings of competence? (emphasis on ending activities)
6. What is the reinforcement that this learning sequence provides for my learners? (emphasis on ending activities)

If each of these questions is adequately answered by the instructor (and integrated into the learning sequence with appropriate activities), learners will have an excellent chance of being motivated to learn throughout the learning sequence.

The primary value of the Time Continuum Model of Motivation is that it is an organizational aid. It can be applied to groups or to individuals. By continuously attending to its six related questions, the instructor can, in any learning situation, design motivational strategies for learners throughout the learning sequence. Each of these questions pinpoints a major motivational factor and can be used by the instructor as a guide to the selection of motivational strategies from a wide array of motivational theories. At this time, for adult instruction, 68 different strategies have been assigned to the Time Continuum Model of Motivation (Wlodkowski, 1985). Such strategies can be translated by the instructor into learning activities or instructor behaviors that are integrated into the learning sequence. Table 1 illustrates the six basic questions as they might be used by a staff developer to select motivational strategies and plan learning activities for each of the six major motivation factors for a group of instructor trainees learning to effectively use an overhead projector.

As Table 1 shows, there is a set of sequenced motivational strategies and related learning activities which have been organized to create a positive motivational influence on the instructor trainees for each time phase (beginning, during, and ending) of the instructional process. This example is illustrative rather than dogmatic. It is possible that a better set of motivational strategies could be found for this particular learning objective. This example essentially clarifies the structure and process of using the six questions based on the Time Continuum Model of Motivation for motivation planning. A much more detailed discussion of both the possible

Table 1. Six Questions Based on the Time Continuum Model of Motivation as Applied by a Staff Developer

Instructional Objective: Trainees will learn to design and make transparencies which they can successfully use with an overhead projector to give a 15-minute lecture.

Question	When Used	Motivational Strategy	Learning Activity or Instructor Behavior
1. What can I do to establish a positive learner attitude for the learning sequence?	1. Beginning of learning sequence	1. A. Make the learning goal as clear as possible. B. Make the criteria of evaluation as clear as possible. C. Use models similar to the learners to demonstrate expected learning.	1. After explaining the value and purpose of the overhead projector, pass out to each trainee a performance criteria checklist for use of this machine and show a fifteen-minute videotape in which a former trainee demonstrates exemplary utilization of the overhead projector. Explain the criteria during the showing of the tape.
2. How do I best meet the needs of my learners through this learning sequence?	2. Beginning of learning sequence	2. Reduce or remove components of the learning environment that lead to failure or fear.	2. Explain to trainees that they will have a chance to practice making transparencies and using the overhead projector and that you will be available to them as a consultant during these times.
3. What about this learning sequence will continuously stimulate my learners?	3. During main phase of learning sequence	3. Make learner reaction and active participation an essential part of the learning process.	3. A. Give each trainee an opportunity to adjust a "problem" projector, asking them to label each part they manipulate to solve the problem. B. After passing out to each trainee the instructions for making write-on and burn-on transparencies and demonstrating how to make each type, allow trainees to practice making their own under your supervision.
4. How is the affective experience and emotional climate for this learning sequence positive for learners?	4. During main phase of learning sequence	4. Use cooperative goal structures to develop and maximize cohesiveness in the learning group.	4. Divide the trainees into triads. With assistance from the peers in their triad, each trainee is to develop a fifteen-minute presentation on any topic accompanied by appropriate use of the overhead projector as a visual aid. Each triad will receive one projector for practicing. The trainees are encouraged to use the performance criteria checklist passed out at the beginning of the training session to give feedback and guidance to members of their triad.
5. How does this learning sequence increase or affirm learner feelings of competence?	5. Ending of learning sequence	5. Whenever possible, use performance evaluation procedures to help the learner realize how to operationalize in daily living what has been learned.	5. Each trainee is videotaped and evaluated while making a fifteen-minute presentation using an overhead projector as a visual aid. Each person is evaluated by the entire group of trainees as well as the staff developer with the performance criteria checklist as the evaluation standard.
6. What is the reinforcement that this learning sequence provides for my learners?	6. Ending of learning sequence	6. Provide a reinforcing event for positive closure at the end of significant units of learning.	6. Each trainee who attains an 80 percent or better average score on the checklist will have achieved mastery of the training objective and will receive a personal copy of his or her videotape with the appropriate positive feedback clearly noted.

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motivational strategies and the process of motivation planning is found in *Enhancing Adult Motivation to Learn* (Wlodkowski, 1985).

The Time Continuum Model of Motivation allows for as many strategies to be used as the instructor believes are needed. The instructor's knowledge of motivation, subject matter, instructional situation, and time constraints will determine the quality and quantity of the motivational strategies employed. With this model, an instructor who knows only a few principles of motivation, as well as an instructor who knows many, can at least have a means beyond trial and error for cohesively applying them to the instructional setting. The model also fits the actual process of instruction as it is conducted in learning environments, with sequenced activities and particular objectives having a holistic, patterned framework that includes a time orientation, subjective viewpoint, and a logical method to combine strategies of motivational theories that are often set apart by their conflicting assumptions. With the use of this model, instructors can plan instruction which supports, strengthens, or increases the amount of motivation that adults possess when they are learning. In this manner there is a realistic method by which instructors can become both a valuable resource and a vital partner to what adult learners everywhere desire—a motivating learning experience.

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By Gino Sorcinelli and Mary Deane Sorcinelli

The lecture in an adult education environment: Teaching strategies

Recently, commentators on American higher education have called for less lecturing and more use of active modes of teaching to promote student involvement in their own learning (AAC, 1985; Bennett, 1984; National Institute, 1984). Such major reports mirror the sentiments of researchers and practitioners in adult education who suggest that many adults prefer to learn from some method other than classroom lectures (Cross, 1981; Knowles, 1978; Tough, 1976). Adult educators, in fact, have long challenged the notion that the classroom lecture is an effective device for increasing student involvement and learning (Cross, 1981; Knowles, 1978).

Despite such criticism, the lecture remains an essential part of adult education classes, particularly when it provides for presentation of overviews or new information that might not be available elsewhere. The authors, as teachers of adults and trainers of adult educators, rarely observe an instructor who does not lecture. Instead, adult educators often teach along a continuum, combining lecture and other methods (e.g., learning pairs, discussion groups, case study analysis) depending on their own strengths, preferences, and needs as well as those of their adult learners.

Perhaps the problem in comparing the lecture to other modes of instruction is that we view them as dichotomies. But, such techniques as lecture, discussion, buzz groups, role play, and simulation are often interrelated in class, each providing students with opportunities to collect, sort, analyze ideas, and participate in the learning process. In this article, the authors suggest eight steps an adult educator can take to shape the lecture so that it encourages learning in an adult education environment.

First Step: Decide Your Learning Objectives

Webster's defines lecturing as, "An informative talk before an audience or class, etc., and usually prepared beforehand" (Webster's, 1982). Before adult educators "inform" adult learners, they should determine when teaching through lecture is appropriate. Lecturing is well suited if the instructor needs to deliver information not readily available from other sources (e.g., text, state-of-the-art research, current events), to summarize material scattered among sources, or to efficiently transmit important concepts when operating under constraints of time or class size (McKeachie, 1978). A short or "mini-lecture" is particularly effective when introducing new ideas or providing a framework for other learning activities that will follow.

Other methods of teaching may be more appropriate than lecture in achieving such higher-level objectives as application, synthesis, evaluation, or motivation and should be incorporated into each class session. By asking "What do I want students to be able to do at the end of this class?" an instructor can better determine what teaching method or combination of methods to use.

Second Step: Capture Student Attention

Before students can assimilate and process information, they must attend to it (Davis, 1976). To the instructor's advantage, many adult students come to class voluntarily and are motivated to pay attention to classroom instruction for the sense of achievement, self-esteem, or upward mobility that such formal education promises. Still, adults are often fatigued when they attend class after a day at work or in the home. Further, adult education classes are often scheduled in long, concentrated blocks of time which discourage sustained interest. There are several ways the adult educator can stimulate attention and interest.

1. Adult students are interested in doing well on evaluation. Showing the relationship of the content of a lecture to the eventual evaluation activities will increase students' interest in learning it.

2. Student interest can be piqued by showing the relevance of the content to a task or job skill that must be performed. Adults are highly pragmatic learners and want to make direct use of the knowledge they gain (Cross, 1981). Begin lectures by creating a link between the content and the experiences or interests held by adult students. The desire for relevance is illustrated by the comments of an adult educator the authors taught in a hazard control program: "When I was an undergraduate chemistry major, I was interested in the chemical make-up of flammable materials. But when I teach about hazardous chemical to Navy men and women,

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what they want to know is, 'If something has the potential to explode at work, what do I need to know to handle it?'" Here, immediate need for a skill increased student interest in the topic.

3. Raise some thought-provoking questions that the lecture will answer. For example, in the authors' "Introduction to Computers" course, we ask, "What will be the long-term impact on your job when this technology is brought to your workplace?" Provocative questions will arouse student curiosity and may help them to attend to the more important features of the lecture.

4. Focus on controversial or crucial issues that impact students' personal or professional lives. For example, "Last year several hundred people were killed and thousands injured on the job. As managers you can help reduce these statistics. What can managers do to make the workplace safer?"

Third Step: Provide Learning Guidelines

To the adult educator, a lecture may appear well-organized, prepared, and logical. For the adult student, the same lecture may present a bewildering array of examples, topics, and concepts. Although adult students do not appreciate a rigid classroom format, they do expect the instructor to give cues to the organization of the content. Tell them what will be talked about during the lecture, what to attend to, and how the information relates to previous and forthcoming classes. There are several ways to help students attend to key concepts and not miss essentials.

1. Write an outline of the lecture on the board or an overhead transparency. The board or overhead is also a valuable aid to notetaking emphasizing key ideas. The authors' classroom observations indicate that students write down virtually everything the instructor puts on the board. Highlighting the structure of a presentation allows students to both chronicle and review major ideas and points.

2. Hand out an outline of the lecture. Again, providing a lecture outline helps to focus student attention on the development of ideas. There is some indication, however, that less able students cannot write notes and keep what they hear in memory (McKeachie, 1980). In other words, notetaking blocks the processing of information. Conversely, some studies show that student recall and retention is better if they listen, write, and review notes (Snow & Peterson, 1980). In light of conflicting results, some balance between no class outline and detailed lecture notes seems most helpful.

Fourth Step: Explain Course Material Clearly

There are several points to keep in mind when developing strategies for explaining course material to adult learners. Research on memory and aging tells us that memory remains stable through adult life and there are few problems with long-term memory. Problems in short-term retention occur, however, when the information presented is too voluminous, too complex, not meaningful, and not sensitive to physiological needs of adult learners (Cross, 1981). Adult educators will find the following suggestions for explaining course materials particularly helpful to adult learners.

1. Limit the amount of material covered. The authors find that adult educators try to fit too much information into a classroom session. Instructors would be more effective and their students would do better if fewer points were presented. It is a good idea to limit the content covered to about six or seven "chunks" of information in a 50-minute class session (Eble, 1976; McKeachie, 1980). Presenting too much detailed information causes problems with listening, notetaking, and retention.

2. Explain one major idea at a time. Dealing with one major point before moving on to the next concept or "chunk" of information minimizes complexity. Bligh (1978) offers empirical evidence to support a general form that instructors can follow when making a point. (a) Begin with a statement of your main point. Reinforcement or illustration on the blackboard or overhead is helpful. (b) Elaborate with concrete examples, analogies, or illustrations that are specific and related to the experiences of the adults in class. (c) Solicit feedback by pausing to ask questions and to let students ask questions. (d) Summarize or restate the major concept or point before going on to the next one.

3. Relate content to the adult students' previous experiences or prior knowledge. As adults grow older, meaningless material is more poorly retained (Cross, 1981). If adult students have no experience with a term, they will most likely forget it. Help students to remember and to understand unfamiliar terms by relating them to prior experiences. In teaching-improvement seminars, the authors use an exercise in which students are given a minute to view a series of epigrams and then another few minutes to write them down. When the sequence is "EDZ, RQX, BTW, etc.," students record few correct responses. If the sequence is changed to "ABC, IBM, IRS, etc.," virtually no incorrect responses are recorded. The point is students have previous associations with and so recall the latter epigrams; they immediately forget the former.

4. Be conscious of the physiological needs of adult learners. Most older adults learn as well as young adults when the pace and speed of the learning task is controlled (Knox, 1977). Going too fast is a common weakness of lecturers, and the adult educator should build in frequent pauses and summaries to assist students in listening and processing information. Also, there is a loss of hearing intelligibility of up to 50% for older people (Kidd, 1973). A rapid, monotone, or soft-spoken lecture may diminish the effectiveness of explanations to adult students. Finally, declines in visual acuity call for awareness of classroom lighting. Adults after 50 need up to 50% more illumination than a 20-year-old (Kidd, 1973). Besides providing adequate lighting, make handwriting at the board and on overheads large and legible.

Fifth Step: Vary Presentation

Studies on adult students' attention in a typical lecture show that a decline in student interest begins about 10 minutes into the lecture, reaches a low point at about 40 minutes, and rises again during the last 10 minutes (McLeish, 1976). Adult educators should consciously plan activities that will address this varying pattern of student attentiveness.

One way to help students attend is through use of instructional media. The board, overhead projector, film, slides, videotape, or computer-assisted instruction to reinforce aural learning with visual aids. Always plan beforehand for equipment requests and classroom setup. Prepare the adult student for a visual medium by developing a student guide or list of questions to be answered. Simplicity is the key to effective visual supplements. The more complex, lengthy, crowed, or sophisticated the aid, the less it may actually enrich the adult student's understanding of a topic.

Use of the instructor as a lecturing strategy brings with it some important considerations for adult students. Choose a mode of delivery that is comfortable but varied. Don't read verbatim. Use notes and look at your audience as you fill in the outline. Varying voice, projection, and tone can help to grasp student attention and convey instructor enthusiasm. Don't stand in one place. Use movement, gestures, and eye contact to allow your nonverbal actions to reinforce your ideas and interest in the topic.

Sixth Step: Increase Student Participation

Adults enjoy participative forms of learning and have rich life experiences to contribute to the classroom. Studies of self-directed adult learning projects indicate that discussion, practice, and reading are the most frequent methods for learning. Watching and listening are the least preferred (Tough, 1978). The message should not be lost on those who lecture to adult students. Put simply, the more actively you involve adult students in the learning process the more they will learn. There are several low-risk but effective techniques for involving students in lecture class, regardless of its size.

1. Let students ask questions about the lecture. Ask students to prepare one or two questions prior to the next class or as they arrive in the classroom. The questions can be about the reading assignment, issues, or problems related to the lecture topic. Formulating and writing a question on paper ahead of time often gives the adult student confidence to raise the issue in class.

2. Break students into small groups. Sometimes it is easier to share with a few students than with a class of adults. After making a series of points in your lecture, pause and pose a question or problem. Give students a few minutes to write down an answer, and then ask them to share it with one student next to them. You might ask for responses from the class and offer your own analysis of the issue. You can vary the size (pairs, triads) and constituency of the groups and the ways in which the groups prepare for (prior to class, during class) and report on their discussions (oral, newsprint, notes, board, graded assignments).

Again, involved students are not passive learners. Adults enjoy problem-solving and discussion exercises. The above are strategies the adult educator can readily employ in lecture class.

Seventh Step: Provide a Summary

Adults learn as well as children but not as rapidly (Knox, 1977). What you may think is redundant is reinforcing for the adult student. Summarize the major points of the lecture at the end of class or, better yet, ask students to restate the major topics. Providing a closure to each class gives the adult learner time to pause, recall, and consolidate learning. It allows students to ask questions, clarify homework assignments, and anticipate upcoming topics. Sometimes it is difficult for instructors to discipline themselves to stop and summarize main points near the end of the class. Instead, some find it easier to recap their lecture at the beginning of the next class. This provides an effective summary and relates the upcoming lecture to previous ones.

Eighth Step: Assess the Lecture

At the end of each class session, ask yourself two questions: What did the students learn? How well did I teach?

Student learning can be assessed through both nonverbal and verbal feedback. Notice whether students arrive for class early or late. Do students talk to each other, take out books and notebooks? What are their reactions during class? Are they listening attentively or slumping at their desks? Do they take few notes, write down everything, or copy others' notes to keep up with the lecture?

Verbal feedback also can be helpful. Do students ask and answer questions? Do they understand the topic? There is no reason to lecture for an entire class period. More learning may take place in a 10-minute quiz than the hours of instruction that preceded it. Break for a short quiz that tests on key ideas, and correct it in class for either noncredit or bonus points. Because adult learners are often apprehensive about tests, such quizzes are low risk, provide immediate feedback, and put an emphasis on learning rather than evaluation.

From time to time, arrange for feedback on how adult students assess your presentations. One strategy is to ask students three questions a few weeks into the course: What do you like about this class and/or instructor? What are the problems you are having with this class and/or instructor? What are your suggestions to improve the class or instruction? You can assess your performance further through audio-tape and videotape or by asking a peer or instructional consultant to observe your class (Sorcinelli, 1984).

Conclusion

There are some defensible reasons to lecture to adult learners. Lectures provide overviews and new information that may not be available in other formats, are economical, and stimulate students' attention if done well. There are real problems, however, with reliance on lectures to increase student learning. This article recommends steps for designing lecture classes to provide information and the kind of engagement that encourages adult students to learn. The authors hope these suggestions reinforce readers' notions of what constitutes an effective lecture, provide new ideas and information on teaching adults through lecture, and assist adult educators in finding a balance as they move along the continuum of teaching and learning methods. **AAACE**

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Understanding and Facilitating Adult Learning

STEPHEN D. BROOKFIELD

This article is an excerpt from a chapter in Understanding and Facilitating Adult Learning *by Stephen D. Brookfield. Kind permission to print the material was granted by Jossey-Bass Publishers, 433 California St., San Francisco, CA 94104. The book can be ordered from the publishers at the address given or by phoning (415) 433-1740. Jossey-Bass also published Brookfield's latest book,* Developing Critical Thinkers.

When adults teach and learn in one another's company, they find themselves engaging in a challenging, passionate, and creative activity. The acts of teaching and learning—and the creation and alteration of our beliefs, values, actions, relationships, and social forms that result from this—are ways in which we realize our humanity. The extent to which adults are engaged in a free exchange of ideas, beliefs, and practices is one gauge of whether a society is open, democratic, and healthy. If adults of widely differing class and ethnic groups are actively exploring ideas, beliefs, and practices, then we are likely to have a society in which creativity, diversity, and the continuous re-creation of social structures are the accepted norms. By contrast, societies in which inquiry, reflection, and exploration are the prerogative of a privileged minority are likely to be static, ossified, and hierarchical.

It would be easy for professional educators to translate the above argument into a declaration that a society can be considered healthy to the extent that it provides publicly funded learning opportunities for adults. This may be one indicator of a just society, but it is not the only one and it neglects the enormous amount of significant adult learning, individual and collective, that takes place outside formal educational settings. The teaching-learning transactions undertaken by adults are complex and multifaceted, and they steadfastly refuse simple categorization. They occur in every setting imaginable, are conducted at different levels of significance to the learner, are oriented toward a variety of cognitive, affective, psychomotor, and political ends, and involve a range of formats and methods. We can argue that a T-group workshop for managers, a volunteer literacy effort, a staff development workshop for school principals, a course on collective bargaining for shop stewards, a tenants' action committee preparing a submission to a rent tribunal, a single parents' support group collectively exploring their experiences, and a men's or women's consciousness-raising group dealing with sexism, are all adult learning efforts.

In all these instances, several commonalities are observable. At a very basic level, of course, the participants involved are adults; that is, they have attained the legal and chronological status of adulthood. Second, they are engaged in a purposeful exploration of a field of knowledge or set of skills or in a collective reflection upon common experiences. Third, these explorations of knowledge, skills, and experiences take place in a group setting. Fourth, the participants in these explorations bring to the encounter a collection of experiences, skills, and knowledge that are going to influence how new ideas are received, how new skills are acquired, and how the experiences of others are interpreted. As Gagne has observed, every adult's stock of prior learning and experience coheres into a unique, idiosyncratic mediatory mechanism through which new experiences and knowledge are filtered.[1] Hence, as educators we can never predict with total certainty how one adult (let alone a group) will respond to being presented with new ideas, interpretations, skill sets, experiences, or materials. Fifth, such prior learning and experience also comprise valuable curricular resources. In the examples of the teaching-learning transactions mentioned earlier, the topics discussed, themes explored, experiences interpreted, skills acquired, and knowledge investigated will be influenced by, and will draw upon, this prior learning and experience. The tenants, managers, school principals, shop stewards, single parents, and nonreaders will identify common problems, voice common concerns, specify skills in which they feel that they are deficient, and provide experiences upon which others in the group can reflect.

Finally, the transactions in these groups will be character-

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ized by a respect for individual members that will be manifest in the procedures used. These groups will probably use discussion methods that will allow individual members' contributions to be jointly interpreted and explored; and, if the group leader is acting as a good facilitator, no one member will be cajoled, insulted, or intimidated by the pressure of majority opinion. Leadership of some of these groups will be rotational, and individual members will, at different times and for different purposes, assume temporary leadership of the group. Even where an appointed leader is present, it is likely that he or she will feel no sense of professional dereliction in surrendering "authority" to allow group members to voice concerns, change the curricular focus, and alter previously agreed-upon rules of group conduct. Integral to this climate of respect for individual members is an expectation that the teaching-learning process will be distinguished by a continual negotiation of objectives, methods, and evaluative criteria.

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PRINCIPLES OF EFFECTIVE PRACTICE

Before proceeding to further discussion of facilitating learning, we should clarify the central principles of effective practice. These practices apply chiefly to teaching-learning transactions or to curriculum development and instructional design activities that support teaching-learning encounters and not to marketing, budgetary, or administrative tasks.

Let us consider, then, the following six principles of effective practice in facilitating learning:

- Participation in learning is voluntary; adults engage in learning as a result of their own volition. It may be that the circumstances prompting this learning are external to the learner (job loss, divorce, bereavement), but the decision to learn is the learner's. Hence, excluded are those settings in which adults are coerced, bullied, or intimidated into learning.
- Effective practice is characterized by a respect among participants for each other's self-worth. Foreign to facilitation are behaviors, practices, or statements that belittle others or that involve emotional or physical abuse. This does not mean that criticism should be absent from educational encounters. It does mean, though, that an attention to increasing adults' sense of self-worth underlies all facilitation efforts.
- Facilitation is collaborative. Facilitators and learners are engaged in a cooperative enterprise in which, at different times and for different purposes, leadership and facilitation roles will be assumed by different group members. This collaboration is seen in the diagnosis of needs in the setting of objectives, in curriculum development, in methodological aspects, and in generating evaluative criteria and indexes. This collaboration is also constant, so that the group process involves a continual renegotiation of activities and priorities in which competing claims are explored, discussed, and negotiated.
- Praxis is placed at the heart of effective facilitation. Learners and facilitators are involved in a continual process of activity, reflection upon activity, collaborative analysis of activity, new activity, further reflection and collaborative analysis, and so on. "Activity" can, of course, include cognitive activity; learning does not always require participants to "do" something in the sense of performing clearly observable acts. Exploring a wholly new way of interpreting one's work, personal relationships, or political allegiances would be an example of activity in this sense.
- Facilitation aims to foster in adults a spirit of critical reflection. Through educational encounters, learners come to appreciate that values, beliefs, behaviors, and ideologies are culturally transmitted and that they are provisional and relative. This awareness that the supposed givens of work conduct, relationships, and political allegiances are, in fact, culturally constructed means that adults will come to question many aspects of their professional, personal, and political lives.
- The aim of facilitation is the nurturing of self-directed, empowered adults. Such adults will see themselves as proactive, initiating individuals engaged in a continuous recreation of their personal relationships, work worlds, and social circumstances rather than as reactive individuals, buffeted by uncontrollable forces of circumstances.

These six principles of facilitation have numerous implications for practice. They are observable in many different settings, some of which are formally called "adult" or "continuing" education, some of which are designated as "training" and others that are recognized by other descriptions (networks, self-directed learning, community action, and so on). In general terms, though, a number of direct practice implications are immediately derivable from each principle.

Voluntary Participation

The fact that adults engage in an educational activity because of some innate desire for developing new skills, acquiring new knowledge, improving already assimilated competencies, or sharpening powers of self-insight has enormous implications for what facilitators can do. First and foremost, the educator has no need to spend a great deal of time and energy dealing with outright defiance, veiled opposition, or studied indifference among learners. Those who teach adults in the evening and children or adolescents during the day (as I did for a period) constantly refer to the difference in satisfaction and fulfillment derived from working with the two groups. Because adults' motivations to learn are high, the facilitator is prompted to expand a similarly high level of effort and ingenuity in designing educational experiences and in teaching. Adults' willingness to learn also means that they are less likely to resist participatory learning techniques such as discussion, role playing, games, small-group work, and col-

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laborative analysis of personal experiences.

The voluntary nature of participation by adult learners also means that such participation can easily be withdrawn if learners feel that the activity does not meet their needs, does not make any particular sense, or is conducted at a level that is incomprehensible to them. The same holds true, of course, if learners feel that they are being treated in a humiliating or insulting manner. Facilitators thus have to pay close attention to curriculum development and educational process. Curricular themes for examination and topics to be discussed have to be grounded in adults' experiences, or at the very least there must be explicit connections made between unfamiliar concepts or bodies of knowledge and the current preoccupations or past experiences of learners. This can be done by selecting appropriate resource materials and by framing the investigation of new ideas, skills, or information in terms that are accessible to the learner, given his or her past experiences.

The importance of ensuring that new knowledge, concepts, skills, or frameworks of interpretation are presented to adult learners in a manner that is comprehensible in terms of their own experiences is a major reason for using participatory learning methods. A mass instructional technique such as a lecture may, as Bligh notes, be useful in presenting information in short, twenty-minute periods.[2] As a host of research studies cited by Bligh indicate, however, the lecture is of little use if the educator or trainer is seeking to promote critical thinking or to encourage adults to be more flexible in their attitudes. A one-hour transmission of information in which there is no opportunity for questions, no small group discussion of case-study applications of ideas, no "buzz-group" activity, and no attempt to make connections between the audience members' experiences and the lecture's content is, therefore, poor facilitation. Educators who ignore the use of participatory techniques will find (unless they are stunningly charismatic performers) that their learners are physically absent in increasing numbers or are mentally absent in the sense of not being actively engaged with the ideas, skills, and knowledge being presented. Such mental absenteeism is a frequent response to staff development efforts that do not build curricula on the concerns and experiences of learners and that use mass instructional techniques.

Mutual Respect

A fundamental feature of effective facilitation is to make participants feel that they are valued as separate, unique individuals deserving of respect. To behave in a manner disrespectful to others, to denigrate their contributions, or to embarrass them publicly through extended attention to their apparent failings are behaviors that are, in educational terms, disastrous. Educators who behave in this manner will be faced with a number of consequences. They will find participants leaving, they will be unable to generate the goodwill required to conduct effective participatory learning exercises, and they will find learners so intimidated by the prospect of public pillorying or private censure that they will be unable to learn. Many of the same consequences will result if educators allow learners to behave toward one another in hostile or combative ways. Successful educational experiences are generally characterized by the evolution of some form of group consensus regarding acceptable behaviors by participants.

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Good facilitation, then, is characterized by a respect for participants' uniqueness, self-worth, and separateness. This does not mean, however, that educational encounters are characterized by some kind of universal bonhomie or false camaraderie under which fundamental differences are buried. Central to the effective facilitation of learning is the development of powers of critical reflection, and this means that adults will frequently be challenged by educators and fellow learners to consider alternative ways of thinking, behaving, working, and living. But this challenging of others' ideas and attitudes and this prompting of analysis of one's own behaviors and beliefs must occur in a setting where dissension or criticism of another does not imply some kind of personal denigration. As Brew has observed with regard to discussion groups, it is easy for educational encounters to degenerate into "numbers of people slamming shut their minds in one another's faces."[3] Unless participants evolve what Bridges calls a *moral culture* governing educational interactions,[4] learners will react to being challenged or confronted with alternative and unfamiliar ways of thinking about their work, relationships, or beliefs with resistance and a dismissive mistrust.

One of the most daunting and difficult (but essential) tasks of the facilitator, then, is to set a climate for learning[5] and to assist in the development of a group culture in which adults can feel free to challenge one another and can feel comfortable with being challenged. Without such a climate or culture, teaching-learning encounters run the risk of becoming nothing more than exchanges of entrenched opinion and prejudice, with no element of challenge and no readiness to probe the assumptions underlying beliefs, behaviors, or values. It is useless to run a staff development workshop in which participants compliment each other, repeat the public norms of the organization, and confirm prejudices but never address fundamental differences in philosophy or practice. What is valuable, however, is the honest expression of differences, in an atmosphere where challenge and dissension are accepted as part of the educational process.

Collaborative Spirit

The existence of some kind of participatory and collaborative element is perhaps the most frequently cited difference between school education and the education of adults. In the former, standards, syllabi, materials, and evaluative criteria are generally externally defined according to local or national government regulations and requirements. In the latter, principally because formal accreditation or certification is not the aim of most adult education programs, there is often collaboration in assessing needs and generating objectives, methods of learning, and evaluative procedures. There is also an alternation of educational roles so that at different times various members of the adult learning group will assume responsibility for posing questions, identifying materials, suggesting priorities, and organizing aspects of the group process.

Such collaborative activities are, of course, grounded in the features of voluntary learning and respect for participants. Acknowledging the accumulated experiences of adults as valuable educational resources is frequently touted as a defining principle of adult education, but this can be achieved only through some collaborative medium. The distinct tradition in the facilitation of adult learning is that of adults meeting as equals in small groups to explore issues and concerns and then to take action as a result of these explorations. We can see this in the workers' education movement; the junto, community development initiatives such as the Antigonish movement;[6] community action projects in Liverpool[7] and Northern Ireland;[8] the living-room learning groups in British Columbia;[9] experiments using mass media such as the Canadian Farm Forum;[10] BBC wireless discussion groups;[11] and the Great Books program,[12] as well as in the establishment of residential centers for community development such as the Highlander Folk School[13] and the Ulster People's College.[14] (For a more detailed discussion of these activities and the adult educational component therein, see Brookfield's *Adult Learners, Adult Education, and the Community.*)

Action and Reflection

In the education and training of adults, the term "praxis" is closely associated with the ideas and literacy activities of the Brazilian educator, Paulo Freire. In several works, he discusses a number of specific techniques that were used to help South America illiterates acquire literacy skills.[17] [18] In developing these skills, learners would gradually become aware of forces and structures that were keeping them in a position of dependence. Central to this concept, however, is a process long ago recognized as fundamentally educational by such philosophers of education as Dewey[19] and Neill.[20] This process centers on the need for educational activity to engage the learner in a continuous and alternating process of investigation and exploration, followed by action grounded in this exploration, followed by reflection on this action, followed by further investigation and exploration, followed by further action, and so on. This notion of praxis as alternating and continuous engagements by teachers and learners in exploration, action, and reflection is central to adult learning. It means that explorations of new ideas, skills, or bodies of knowledge do not take place in a vacuum but are set within the context of learners' past, current, and future experiences. In settings where skills are being learned, whether literacy skills, craft skills, or political advocacy techniques, this praxis is easily observable. Learners become acquainted with skills, apply these in real life settings, reflect with other learners on their experiences in these settings, redefine how these skills might be altered by context, reapply these in other real settings, and so on. This is the familiar mechanism of internships and field experience as used in numerous training settings.

In activities concerned primarily with changes in consciousness, attitudinal shifts, explorations of new interpretations of the world, or paradigm shifts of some kind, the same principle of praxis obtains. In these instances, the process is less easily observable as it occurs chiefly through the acquisition of new mental sets. Even here, however, it is hard to imagine anything other than the purest form of philosophical meditation or introspection occurring without the learner's renegotiating certain aspects of his or her relationships, social world, or work life. Adults do not acquire and internalize ideas, skills, knowledge, and insights in a context-free vacuum. They interpret these through the mediatory mechanisms they have developed, assign meaning to them, codify them according to categories they have evolved, and test them out in real life settings. In curriculum design, selection of materials, and use of educational methods, therefore, facilitators should anticipate, and build upon, this tendency of adult learners to interpret, understand, codify, and assign meaning to new ideas, insights, skills, and knowledge in the context of their own experiences.

Critical Reflection

That effective practice aims to foster an attitude of healthy skepticism is a prescriptively based notion, and, as such, it is disputed by some practitioners. They argue that facilitation means assisting adults to acquire skills, knowledge, ideas, and insights that have been defined by the learners themselves. This latter idea is said to exemplify a democratic, student-centered approach to learning, since it assigns to learners the responsibility for assessing needs, identifying educational aims and objectives, and generating evaluative criteria (usually based on the learners' own sense of satisfaction).

Facilitating learning is, however, a collaborative enterprise, and this has implications for more formal settings where the role of "educator" can be clearly identified. In these settings the educator's values and priorities will influence the educational encounter, just as do those of the learners. It is my contention that learning is being effectively facilitated when the educator is prompting in learners a sense of the culturally constructed nature of knowledge, beliefs, values, and behaviors. But to develop this awareness, the facilitator must present alternative interpretations of learners' work lives, personal relationships, and views of the social and political world. This does not mean that the facilitator must try to convert or brainwash learners into accepting some new ideology. It does mean, though, that education must be distinguished from training. In training, a set of clearly identified skills are transmitted, and adults are required to assimilate these in the manner prescribed by the trainer, employing agency, or certification body. In education, by contrast, learners are encouraged to examine the assumptions underlying the acquisition of skills, to consider alternative purposes, and to place skill acquisition in some broader context.

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This is very far from assuming, however, that learning cannot be facilitated effectively in training contexts. In the field of adult basic education, there are many instances in which educators have placed the acquisition of predefined skills in a context that encouraged learners to develop a critically questioning frame of mind. Such an attitude lies at the heart of Freirean methods and is exemplified in practical activities such as work with the elderly, community education, work with college students, promotion of industrial democracy, and work with immigrant women in industrial societies. Manuals of basic education and studies of illiterates stress the development of a positive self-concept, the feeling of self-confidence, and the affirmation of self-esteem that result from coming to view the world differently through learning a language.

The point is that education is centrally concerned with the development of a critically aware frame of mind, not with the uncritical assimilation of previously defined skills or bodies of knowledge. Even within staff development or training activities that seem to be defined by organizational priorities, rather than by the learning benefits accruing to individuals, there is a realization that encouraging shopfloor workers, line managers, supervisors, and executives to challenge existing norms, practices, and structures is essential. Analyses of human resource development, staff development manuals, investigations into conditions for corporate success, and studies of effective learning within organizations all stress the necessity for workers to be aware of underlying assumptions, norms, and uncritically accepted practices and to be encouraged to imagine alternative structures and practices. The eight lessons derived from an analysis of America's most successful companies include a willingness to experiment, an engagement in praxis, participatory involvement of all employees, and managers' acknowledgment of ambiguity. Similarly, the concepts of double-loop learning and deuterolearning developed by Argyris and Schon focus on the ability of workers to become aware of underlying norms, policies, and objectives, to view these as relative and determined by context, and hence to be proactive in advocating change and innovation.

Self-Direction

The last principle of effective facilitation—that facilitators should assist adults to become self-directed learners—has now attained something of the status of an academic orthodoxy. As Kidd has written, "It has often been said that the purpose of adult education, or of any kind of education, is to make of the subject a continuing 'inner-directed' self-operating learner." This idea has been proposed by educators from Lindeman and Bryson to Rogers and Knowles. It is one of adult education's most enduring articles of faith, and like many revered tenets, its meaning has been distorted or skewed by those who choose to define it as they wish. As recent critical reexaminations have made clear, self-direction as a concept runs the risk of being denuded of context and of coming to be viewed solely as a technique in much the same way as programmed learning is now conceived.

It is important to say, however, that making adults self-directed learners does not simply mean assisting them to develop such skills as how to retrieve information or locate resources. Self-direction in learning is not a set of techniques that can be applied within a context of objectives and evaluative criteria that are determined by others. At the heart of self-directedness is the adult's assumption of control over setting educational goals and generating personally meaningful evaluative criteria. One cannot be a fully self-directed learner if one is applying techniques of independent study within a context of goals and evaluative criteria determined by an external authority. (The contradiction at the heart of this idea is illustrated in a recent volume on the application of self-directed learning principles in a number of institutional contexts such as universities and hospitals.) Self-directed learning in adulthood, therefore, is not merely learning how to apply techniques of resource location or instructional design. It is, rather, a matter of learning how to change our perspectives, shift our paradigms, and replace one way of interpreting the world by another.

At the heart of self-directedness is the adult's assumption of control over setting educational goals and generating personally meaningful evaluative criteria.

One task of the facilitator, therefore, is to present learners with alternatives to their current ways of thinking, behaving, and living.

As adults, we are generally enclosed within our own self-histories. We assimilate and gradually integrate behaviors, ideas, and values derived from others until they become so internalized that we define "ourselves" in terms of them. Unless an external source places before us alternative ways of thinking, behaving, and living, we are comfortable with our familiar value systems, beliefs, and behaviors. Teachers who rely on the same exercises and notes for thirty years, managers who continue to employ the same techniques of production organization, or programmers who run the same courses year after year are not going to decide to change these practices simply of their own volition. One task of the facilitator, therefore, is to present learners with alternatives to their current ways of thinking, behaving, and living. Adults who engage in the kind of double-loop learning in which they reflect critically on their assumptions and try to imagine alternatives are fully autonomous, self-directed learners. Such adults are likely to be involved in a continual reinterpretation, renegotiation, and re-creation of their personal relationships, work lives, and social structures.

TRANSACTIONAL DIALOGUES

There are two common approaches to thinking about the facilitation of learning. One of these we might recognize as an operational approach. In this approach, we regard as effective practice any activity in which adults are being taught how to acquire certain skills and knowledge, irrespective of content and context. If adults are learning, and others are arranging the conditions of instruction, then we are witnessing effective facilitation.

A contrasting approach to the facilitation of learning views effective practice not just as helping adults acquire skills and knowledge in a context- and content-free manner but as containing some intrinsic features regarding the process and content of teaching and learning. Hence, educational encounters in which learners are abused or intimidated or racial prejudices are encouraged would not be regarded as facilitation in its fullest sense. Neither would we regard as good practice those instances in which adult learners are reproduced in the image of the facilitator; that is, when they mirror his or her ideas and beliefs exactly and demonstrate no capacity for critical reflection. Finally, this approach would exclude activities in which the learner is given no say in the method, aims, or content of the teaching-learning transaction and in which any deviation from a present facilitator norm is met with exclusion from the educational activity.

This alternative approach is an intrinsic approach: It recognizes that education is value based and that facilitators should therefore be explicit concerning the values on which their ideas of good practice are based. The basis for this second approach is that education is essentially a transactional encounter in which learners and teachers are engaged in a continual process of negotiation of priorities, methods, and evaluative criteria. Viewing teaching-learning encounters as transactional means that the sole responsibility for determining curricula or for selecting appropriate methods does not rest either with the educator or with the participants. If the first obtains, then we have an authoritarian style and a one-way transmission of knowledge and skills that exemplifies all the worst aspects of the banking system of education[illegible] or what Lindeman called the additive process,[illegible] whereby the teacher receives from students precisely what has already been imparted from the teacher's academic repository, and the educator retains total control over the goals, content, and evaluative criteria of the educational activity. If the second approach prevails and curricula, methods, and evaluative criteria become determined solely by what learners say they want, then we run the risk that a service rationale[illegible] or ''cafeteria'' approach[illegible] will govern what passes for education. If the educator simply meets those needs articulated by groups and individuals, he or she may function as little more than an administrator, publicist, and budget specialist. Skills of administration, marketing, and financial management are certainly important in order to create the conditions under which teaching and learning can occur. We should be careful, however, of confusing the exercise of those skills with the sum total of what it means to be an effective facilitator.

Neither would we regard as good practice those instances in which adult learners are reproduced in the image of the facilitator. . . .

Accepting the felt needs rationale and giving learners what they say they want means that the facilitator has abdicated responsibility for contributing to the debate about normative standards, values, and criteria in training and education. To say one is meeting felt learner needs sounds humanistic, learner centered, and admirably democratic, yet to do so without allowing one's own ideas, experience, insights, and knowledge as an educator to contribute to the educational process makes the facilitator a service manager, not a fully participating contributor. It also condemns learners to staying within their own paradigms of thinking, feeling, and behaving. Since it is very difficult to generate alternative ways of thinking about, and behaving in, the world entirely as a result of one's own efforts, an important task of the facilitator is to present to learners diverse ways of thinking and acting.

. . . giving learners what they say they want means that the facilitator has abdicated responsibility for contributing to the debate. . . .

One of the greatest myths that has sprung from an acceptance of the felt needs rationale is the belief that learning is always joyful, a bountiful release of latent potential in which the learner is stimulated, exhilarated, and fulfilled. This often happens. But it is also often the case that the most significant learning we undergo as adults results from some external event or stimulus that causes us to engage in an anxiety-producing and uncomfortable reassessment of aspects of our personal, occupational, and recreational lives. This external stimulus may be a calamitous event, such as being fired, experiencing the death of a parent, sibling, or spouse, going to war, or coping with a divorce. The learning in which we are forced to engage as a result of these events may be unsought and may have many painful aspects. Nonetheless, we may regard such learning as highly significant, precisely because it caused us to question our ways of thinking and behaving in our personal relationships, occupational lives, or social activities. Such questioning is initially uncomfortable and may be resisted, but it will often be the cause of our deciding to change some aspect of our lives. As anybody who has renegotiated an intimate relationship, who has confronted a parent, or who has attempted to change the patterns of relationships and activities in the workplace knows, to question the validity of the assumptions under which he or she has been living and to try to change the habitual activities and responses of oneself and others are not always joyous, releasing, and exhilarating experiences. We may conclude after this act of learning that the pain and anxiety were worthwhile, since they resulted in our living more fulfilling and stimulating lives. But as we are forced to undergo this reexamination of values, beliefs, behaviors, and assumptions about ourselves and those around us, we may find the activity to be an unsettling, painful struggle in which glimpses of insight alternate with confusion, uncertainty, and ambiguity.

The contribution of the facilitator to the teaching-learning transaction is somewhat of the order of the calamitous events mentioned earlier. It is not enough for educators and trainers to say to learners, ''Do what you want, learn what you want, in whatever manner you wish, because you are the sole determinants of your educational destinies.'' This resembles a conversation in which one partner agrees with whatever the other says. Such conversations may be initially agreeable, but eventually one begins to suspect that the listener who responds to one's every comment and suggestion with enthusiastic agreement is not really listening at all. A conversation, after all, is also a transactional dialogue in which the comments and contributions of the participants build organically on each other's views and in which alternative viewpoints, differing interpretations, and criticism are elements essential to the encounter.

We may think of facilitation in much the same way, as a transactional dialogue between participants (teachers and learners) who bring to the encounter experiences, attitudinal sets, and alternative ways of looking at their personal, professional, political, and recreational worlds, along with a multitude of differing purposes, orientations, and expectations. The particular function of the facilitator is to challenge learners with alternative ways of interpreting their experience and to present to them ideas and behaviors that cause them to examine critically their values, ways of acting, and the assumptions by which they live.

We should note here that there is an enormous difference between facilitation and attempts at political or religious conversion in that in the latter activities the political or religious ideologues have predetermined the learning outcomes of the activity. They possess an ideology that they feel comprises the one true way of living in and thinking about the world, and views that do not coincide with these ideologies are deemed to be examples of bad faith, false consciousness, or wrong thinking. In effective facilitation, by contrast, the educator may hold beliefs about how people should think and act that he or she passionately espouses, but such beliefs are presented to learners for the same critical scrutiny and analysis that the participants apply to ideas of which the educator is personally critical. The end of the encounter, in other words, has not been preordained as the acceptance by participants of the facilitator's values and beliefs. Educators would be foolish to deny that they possess their own beliefs or to pretend that they are blank pages on which philosophies and values are yet to be written. However, while they present their own ideas to learners as part of the teaching-learning transaction, they invite criticism and analytical scrutiny of these ideas by participants, and they are open to revising them as a result of this dialogue with learners. Political and religious ideologues do not seek to learn from the people they are attempting to convert, and neither do they encourage critical and skeptical scrutiny of their views. Since they believe themselves to be in possession of some universal and divinely ordained truth, there is no need for them to learn from others, and criticism appears irrelevant.

Facilitators are not blank ciphers through whom the demands and wishes of learners are uncritically transmitted, but neither are they authoritarian ideologues who prescribe curricula and methods that are to be considered as rigidly fixed and immutable. In an effective teaching-learning transaction all participants learn, no one member is regarded as having a monopoly on insight, and dissension and criticism are regarded as inevitable and desirable elements of the process.

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